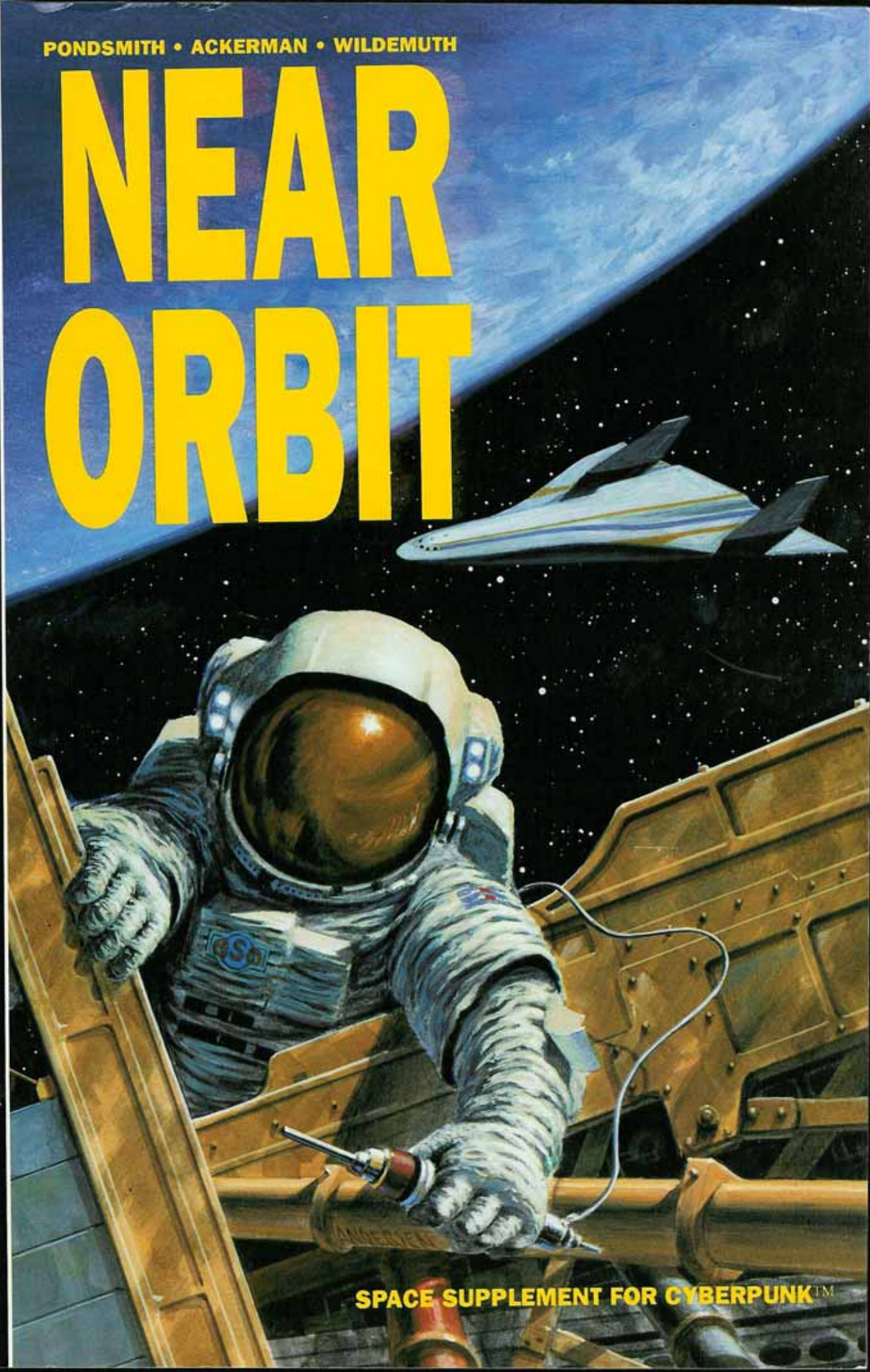


PONDSMITH • ACKERMAN • WILDEMUTH

NEAR ORBIT

Cyberpunk



SPACE SUPPLEMENT FOR CYBERPUNK™

NEAR ORBIT

THE CYBERPUNK SPACE
SUPPLEMENT



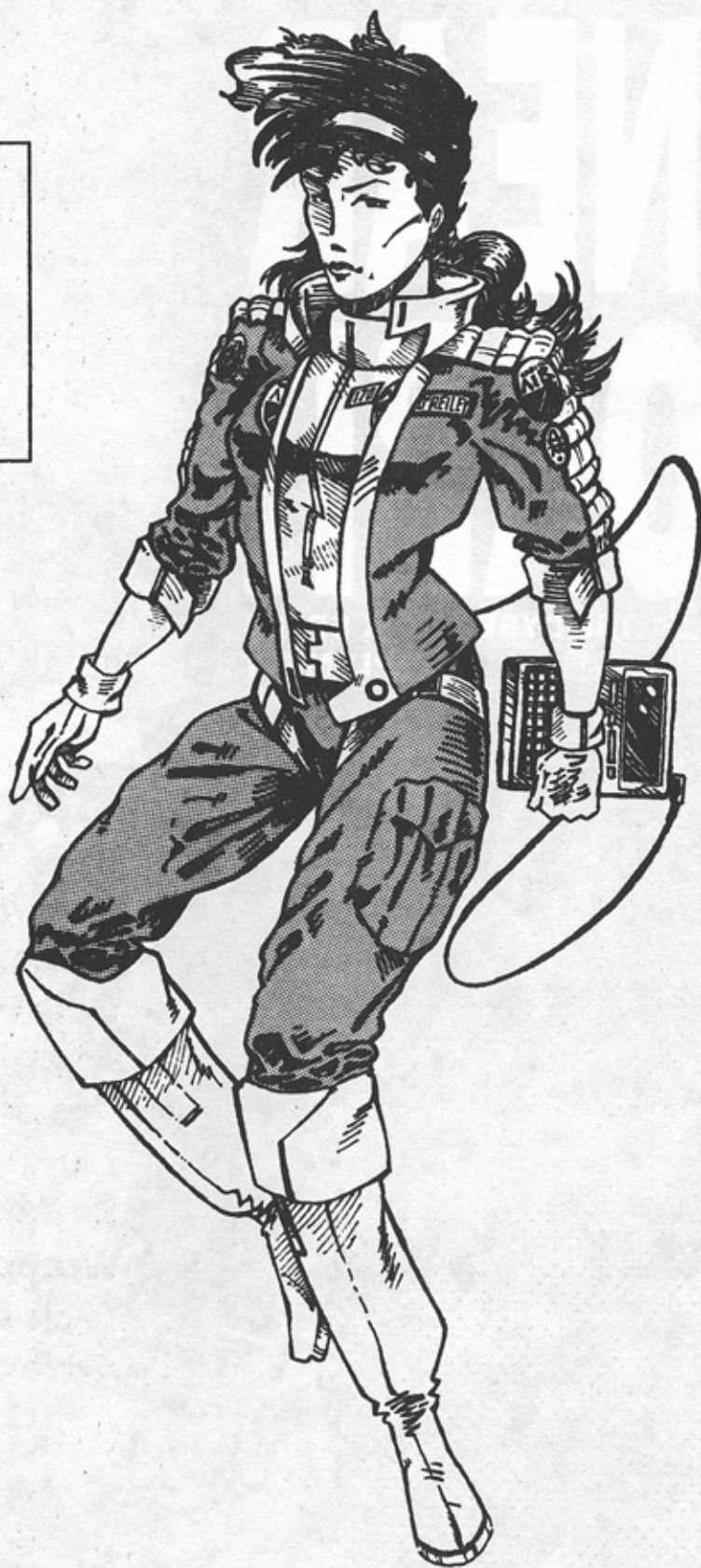
NEAR ORBIT

THE EDGE OF SPACE

Dedicated to —
Gerard K. O'Neill
For the endless possibilities

Werner Von Braun
For making the reality possible.

Mark W. Miller
For making the possible fun.



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The CYBERPUNK™ Space
Supplement

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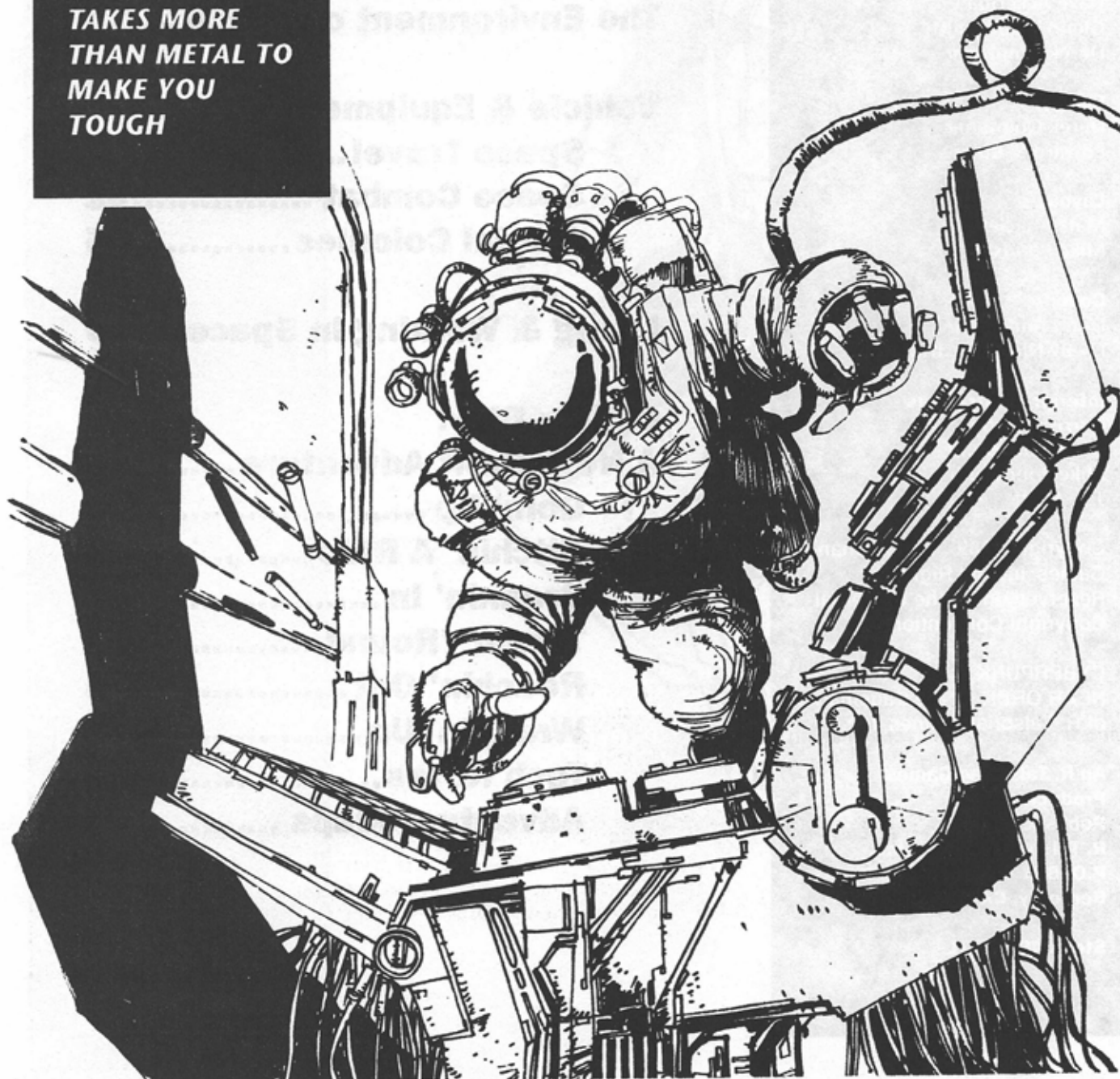
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NEAR ORBIT

ON THE EDGE OF SPACE

ON THE HIGH
FRONTIER, IT
TAKES MORE
THAN METAL TO
MAKE YOU
TOUGH



EARTH— 2013

The Corporations control the world from their skyscraper fortresses, while armies of cyborg killers roam the shattered urban ruins. The seas are a chemical witch's brew slicked with oil, the skies are black with acid rain, and vast deserts sweep across what was once fertile farmland. The cities of Earth teem with human scum, as fashion models rub biosculpt jobs with battle-armored roadwarriors in the meanest streets this side of the Postholocaust.

This is the world of *CYBERPUNK*.

But only a scant hundred miles above the steaming, polluted atmosphere of the *Cyberpunk* Earth is another world. Silent, frigid, it is the world of great spinning cylinder-worlds, speeding spacefighters, spiderlike orbital vehicles, and the titanic white lattices of the Deep Space explorers.

This is the world of *NEAR ORBIT*.

THE VIEW FROM SPACE

Mankind has exploded out into the stars. At the Near Earth Orbit Zones, the skies are crowded with space traffic; busy Orbital Transfer vehicles unloading cargos from space shuttles, sleek spaceplanes docking among the spider-web girders of habitats and stations. There are nearly two hundred factories in orbit, with automated workstations churning out drugs, plastics, alloys and tools for corporate markets on Earth.

Microwave satellites spread lattice wings to catch the solar wind, converting its energy to microwaves and beaming it down to the power starved millions below. Skirting the outer fringes of the atmosphere, the sinister arrowhead shapes of spacefighters and deltas cruise, seeking out enemy lasersats with their kinetic kill weapons.

At the stable orbit of L-1, hanging suspended between Earth and Luna, is the huge spinning wheel of the Crystal Palace; Mankind's premier space colony and the glittering crown of the EuroSpace Agency's achievements. Looming just beyond at L-5 is the half completed shell of O'Neill One: the titanic micro-planet whose cylindrical bulk will eventually span twenty miles (20km). Ablaze with light, it is attended by a horde of construction 'droids, manned construction vehicles and automated factories. Hourly, the huge massdrivers of Tycho and Copernicus Cities hurl tons of Lunar rock out to the worksite.

These two lunar cities are self-sustaining colonies, tunnelled into the floors and walls of their respective craters, with miles of solar collectors providing the raw energy to terraform a dead world. The mile long tracks of their massdrivers are buried deep within the crater rock, a dark reminder of the time when the ESA used them to hurl multi-tonned rocks at Earth.

Welcome to the Space Age.

IN LOW ORBIT

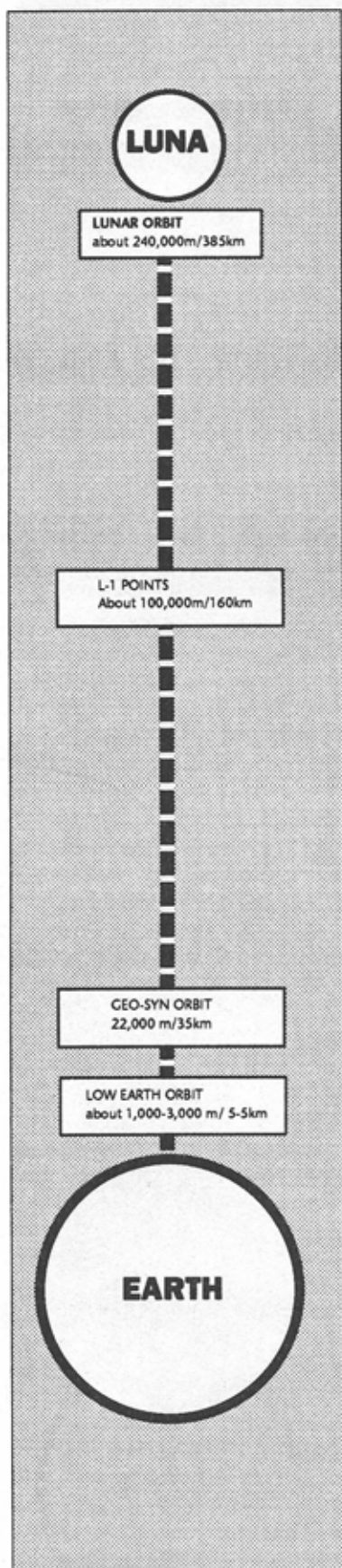
In Low/Near Earth Orbit (LEO), the traffic is fairly light. Communications, weather and spy sats shift from this zone to Geo-syn Orbit and back as their programmed routines dictate. LEO is also the domain of orbital space fighters and battle satellites, which require closer orbits and a higher degree of maneuverability.

GEOSYN ORBIT

In GEO-SYNchronous Orbit (22,000 miles / 37,000km), the terrain is dominated by orbital work stations, small factories, battlesats (US and USSR), and other stable platforms. It is here that ground-based spaceplanes and shuttles dock with Orbital Transfer Stations, shifting crews and cargo to outbound Orbital Transfer Vehicles (OTVs).

NEAR ORBIT

THE EDGE OF SPACE



THE L-ZONES

The "L points" (or Lagrange Stationary Points), occupy stable positions relative to Earth and Luna, making them perfect for long-duration, self-contained bases, factories and construction sites. At the L-1 and L-5 points orbit the two largest space constructions in existence—the roughly toroidal Crystal Palace space station, and the mammoth (and still unfinished) O'Neill One Habitat.

ON LUNA

Since the early 2000's, the ESA and its allied nations have maintained permanent bases on Luna. The original bases were simple pressure domes and modified workshacks boosted by OTVs and soft-landed in sections. Over the last ten years, these footholds have been expanded through the use of nuclear and solar powered laser-drills (collectors on surface, and cutting drill below), which have created networks of subsurface tunnels. Water is provided through recycling and the mining of Lunar ice, while air comes from subsurface hydroponic gardens (lit by rolling back huge shutters on the surface).

There are two permanent cities on Luna, both controlled by the EuroSpace Agency. **Tycho/Luna Colony**, the largest, maintains two known massdrivers, used to boost Lunar rock and ore out to the L-5 constructions. The population is approximately 10,000. The second colony, at **Copernicus**, supports a single massdriver, and a population of around 5,500.

FURTHER OUT

At this time, Mankind barely possesses the technology to travel beyond the Earth-Luna system. Although NASA's recent breakthroughs in nuclear engines have proven promising, it still remains to develop more than a few deep space-capable ships. Missions are planned for Mars and the Jovian systems within the next five years.

THE PLAYERS

SEVEN PLAYERS MAKE UP THE TEAMS OF THE NEAR ORBIT FUTURE.

ESA

After its technological coup with the **Hermes II** spaceplane (a small suborbital shuttle with scramjet capabilities), the ESA concentrated on building workshacks and the spaceplanes to supply them. The current ESA main vehicle is the **Aries 15 spaceplane**, which is equivalent to the US' partially developed "Orient Express" spaceplane.

ESA concentrated on workshacks and taking control of LEO for manufacturing processes. In this endeavor, it was funded by several multinational combines from the EEC, who traded materiel and money for orbital factories. To get these huge projects into space, the ESA made a deal with the Soviets, who provided heavy lifting capacity in exchange for ESA spaceplane flights to their own workshacks. Eventually, ESA helped found **Orbital Air**, the main carrier of personnel into space and the only licensed owner of the Aries 15. The Crystal Palace is the ESA's first longterm venture, with sections of the immense habitat leased to the US, USSR, Japanese and Chinese.

The ESA has the best ability to deploy people into space, as well as the largest number of workstations and automated space factories. It is very, very rich, taking a 10% commission off all space-related manufacturing. In addition, the ESA has control of most of the law enforcement in LEO and High Orbit, through the EEC-controlled INTERPOL space police. ESA wants to sabotage the planned NASA spacecraft before the USAF can use it as a weapon.

NASA

After the Challenger disaster, NASA found more and more of its subsequent shuttle runs going to military payloads. Eventually,

the United States Air Force was given three shuttles in its budget for 1996. These military payloads eclipsed NASA, which subsequently found its budget slashed to the bone. Relegated to deep space unmanned probes and rare shuttle flights, NASA did manage to launch one small space station, which was nearly abandoned by the 2000s.

NASA has the best long-range robot probes, and the largest body of technical information on space. They also have the most sophisticated hardware designers and could build a deep space explorer if they had the budget. They currently have working ion, fusion and fission drives.

NASA hopes to get back into the mainstream by launching the first major deep space expedition to Mars—the current SOV-ESA mission will only carry five people. NASA plans to send fifty, plus TAVs, landers and colonizing modules.

USAF

The United States Air Force is the surviving US partner in space exploration. While NASA fought for funding in the 90's, USAF reactivated its X-15 program, linked it to the new scramjet technologies of the "Orient Express" program, and created a series of low-and-high orbital fighters designed to knock out shuttles, satellites and workshacks. USAF has a huge budget for "Star Wars" space tech such as laser sats, spy sats, and other "space superiority" weapons.

The USAF has the best weapons, spy and laser sats and battle platforms in space. USAF distrusts the Soviets, and wants to use the planned NASA nuclear-thermal spacecraft as a military weapons platform.

SOVIET ROCKET CORPS

Under the Gorborev regime, the Strategic Soviet Rocket Corps was rapidly demobilized from a military to a civilian status. In a brilliant move, the SRC refitted nearly 40% of its MIRV missile fleet to heavy payload carriers, leasing them to the ESA and other nations. With the best heavy lifting vehicles and the largest body of data on long-term man-in-space projects, the Soviets were able to trade themselves into the

current space frontier boom. They sold advertising on spacesuits, set up construction projects, and eventually established KOSMOSOV, the state-operated heavy lifting vehicle combine.

Trading for ESA technical information, the SRC also built up a moderate military presence with orbital stations, spy and laser sats, battle sats and ground laser arrays. Much of the huge laser complex at Sary Shagan has been converted to laser-lift vehicle support, but can be reconverted within 72 hours. Many of the USSR's older nuclear missiles were sold outright to Japan, Argentina, and the EEC to boost payloads into orbit.

The biggest payload lifters into orbit, the Sovs also have the most long-term man-in-space experience. The SRC couldn't build a deep space probe, but could build the basic life support systems and boost them into orbit easily.

JAPANESE AEROSPACE BUREAU

The Japanese Aerospace Bureau traded the ability to mass produce cheap, efficient workshacks for access to space via ESA spaceplanes. As a result, close to 85% of all workshacks and space stations are Japanese built. The JAB does not have much high mass lifting capacity or passenger lift ability, although Japanese technology built the Kilimanjaro massdriver (the first massdriver was used on a Japanese railroad in the 1980's!). The Japanese are also the main manufacturers of heavy colony construction equipment, including their recent "mobile construction suits" used in building the O'Neill colony at L-5. Recently, the Japanese are beginning to worry about their aggressive EEC partners. They have taken to arming their MC suits with anti-sat weapons—just in case.

NEAR ORBIT

THE EDGE OF SPACE

The Japanese are the primary supplier of habitats, parts, gear and cheap lifting systems for light payloads. They control 50-60% of all massdriver tech. The Japanese want to help NASA as this will give them a heavy payload lifting ability of their own, as well as a crack at the Asteroids and Mars (a cheaper colonizing alternative than the O'Neills).

SUMMARY

In short:
NASA explores space, USAF fights in space, ESA sets up places in space and sends up people, Japan builds in space

and the Soviets lift things into orbit while watching the Americans. At the Crystal Palace, all five meet and fight over control. No one trusts anyone, and an uneasy cold war is freezing throughout space.

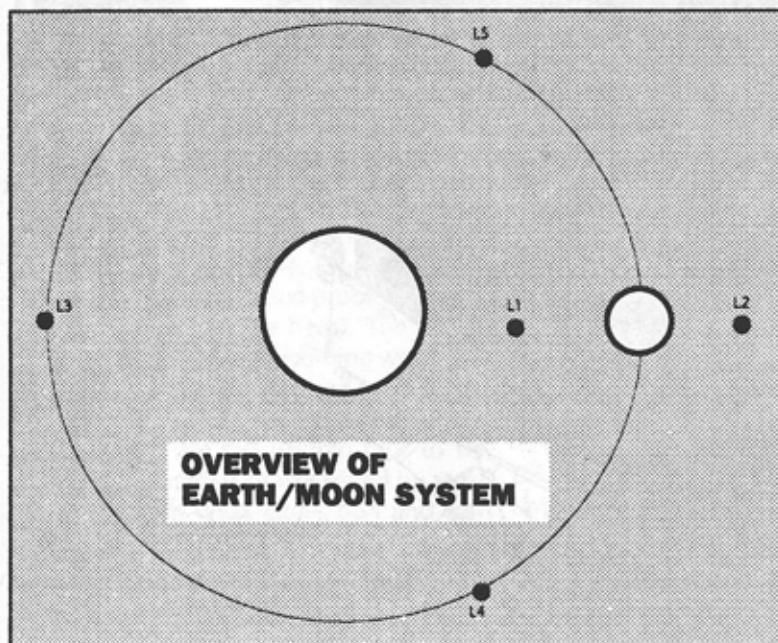
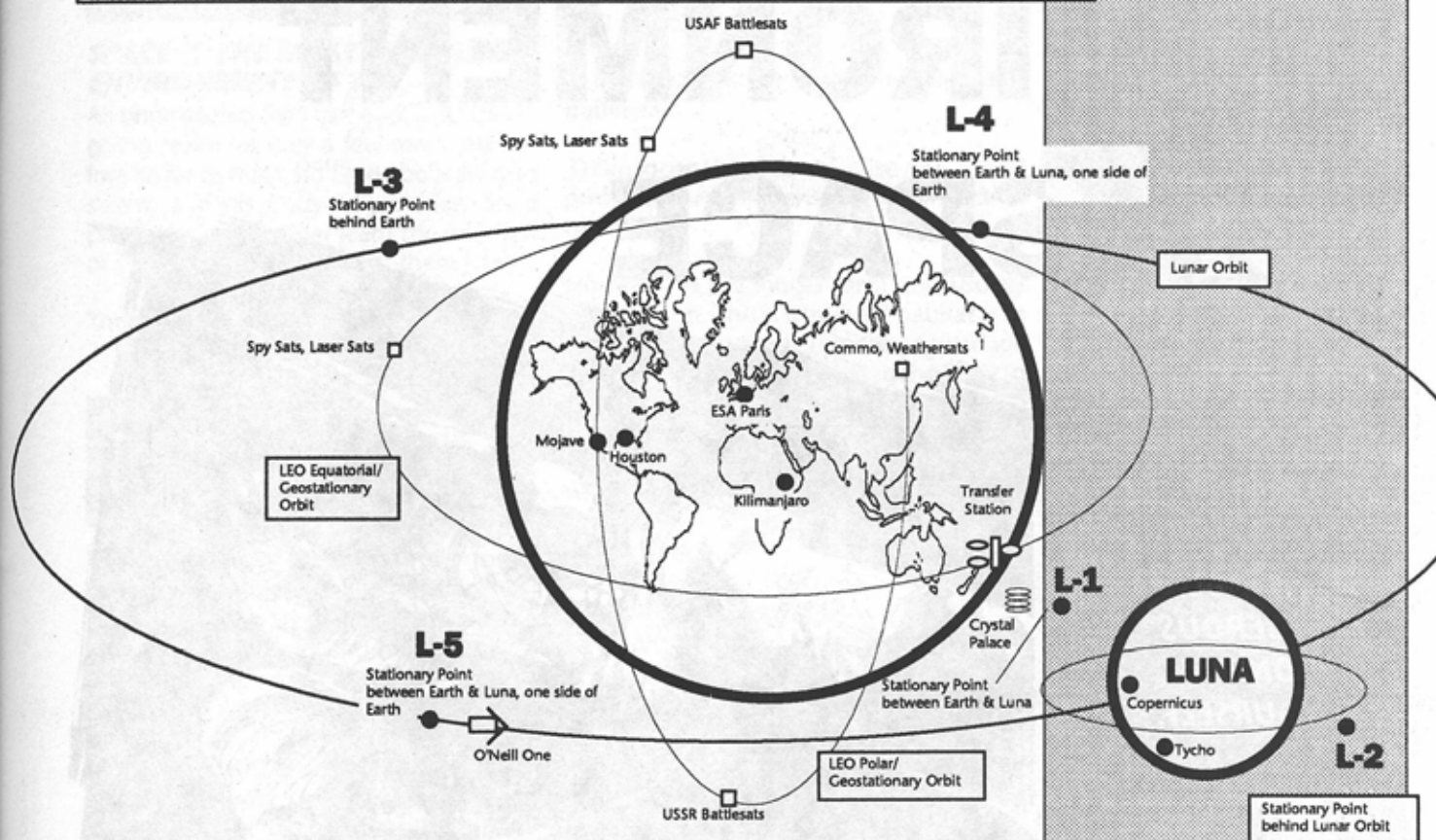
Meanwhile, an entire generation of spacers are growing up in Near Orbit, planning to escape ESA, SOV, USAF and Japanese domination. These orbital colonies are fully autonomous, space based agencies—the future of Man in Space.

Get ready for the revolution.

WORLD SPACEPORT/FACILITIES MAP, 2013



THE EARTH/MOON SYSTEM, 2013



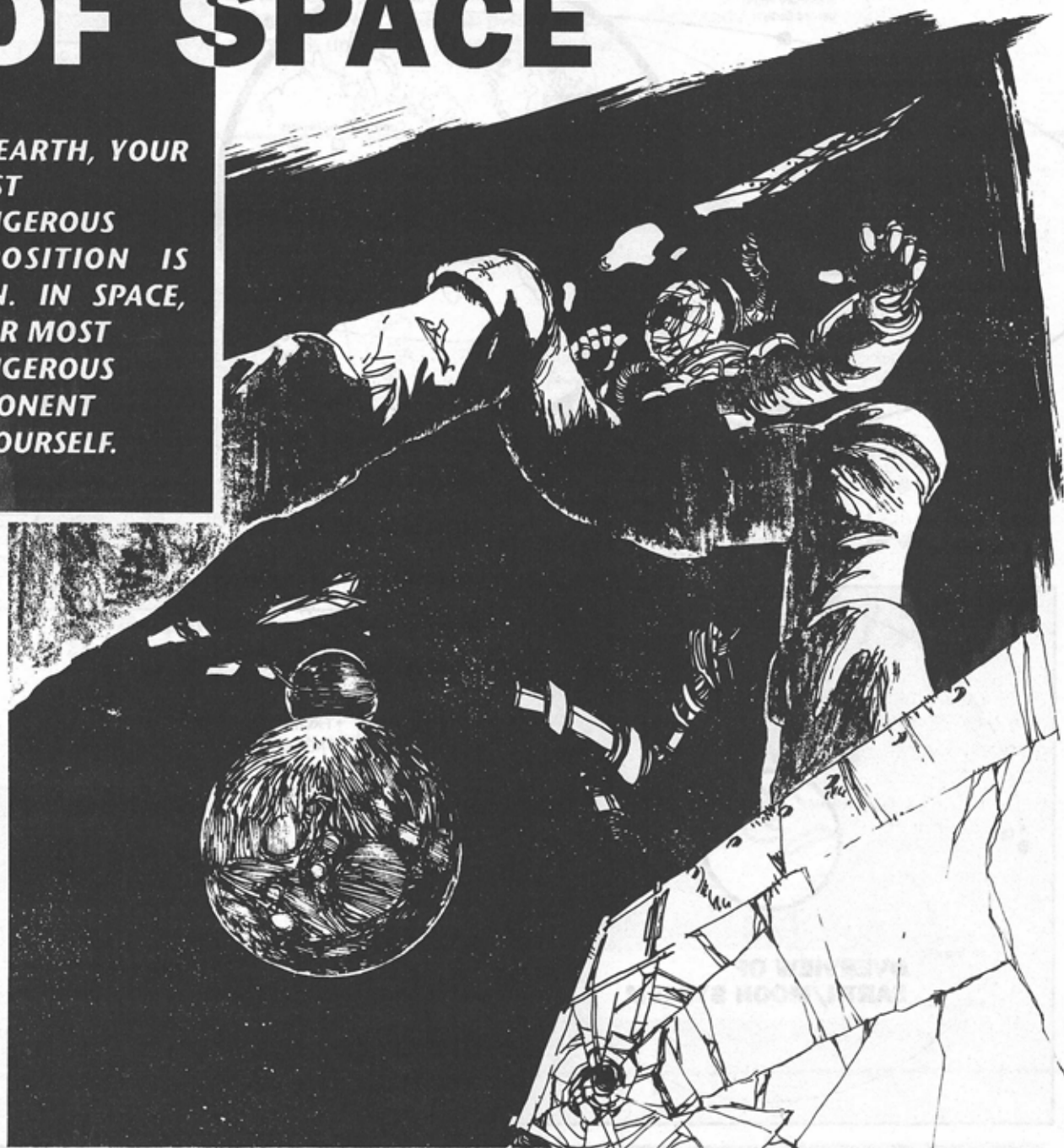
TRAVEL TIMES (approx.)

- FROM L1 (Palace) TO LUNA = 2.5 days
- FROM L1 TO L5 OR L4 = .5 days
- FROM EARTH TO L1 (Palace) = .5 days
- FROM EARTH TO L4, L3, L5 = 1.5 days
- FROM EARTH TO L2, 3 DAYS

NEAR ORBIT

THE ENVIRONMENT OF SPACE

ON EARTH, YOUR
MOST
DANGEROUS
OPPOSITION IS
MAN. IN SPACE,
YOUR MOST
DANGEROUS
OPPONENT
IS YOURSELF.



FORGET THE GUNS; WORRY ABOUT THE AIR.

SPACE IS THE MOST HOSTILE ENVIRONMENT OF ALL.

An unprotected man can exist in its unforgiving realm for only a few moments before his lungs burst, his blood boils away to steam, and his body freeze-dries. It's a place where you either learn the rules fast or you don't survive to learn them later.

The most important rule is the Triad.

THE TRIAD

Every spaceborn child knows (and lives by) a triad of critical factors. These are **Pressure, Gravity** and **Radiation**. They are the triumvirate upon which human life in space depends. These conditions are drilled from birth into every spaceborn child, and are the basis for Orbital culture.

GRAVITY

The first leg of the Triad is Gravity. In space, there is no gravity, unless you make some. As the mythical "artificial gravity field" of science fiction has yet to be discovered, spacers make gravity by applying centrifugal force, or ignore it altogether.

The effects of zero gravity on a terrestrial body are interesting and eventually fatal (this takes up to four years, but the body gradually wears down). In zero gee, fluids pool in the chest and face, making you puffy and uncomfortable. Eventually, this pooling causes congestion problems in the lungs and weakens the heart. The bones begin to lose calcium, becoming weak and brittle—eventually, they may even begin to bend. Circulation declines, and important minerals are lost. Within four to six months, the body is so weakened by atrophied muscles, weak circulation and calcium loss that it can no longer stand up in gravity.

There are a number of ways Orbital personnel have adapted to this problem. For the short term, a visiting Groundsider takes a daily dose of:

- 1) **Calcium tabs** to replace lost bone and stop decalcification.
- 2) **Duretics** to control water retention and puffiness.
- 3) **Vasoconstrictors** to raise the blood pressure and compensate for the lack of gravity.

However, in the longer term, this usually isn't enough. This is why every habitat area has a **gravity wheel**. This mini-centrifuge creates a 0.5 gee pull, allowing the body to get a little gravity each day. Gravity wheels are common on most large habitats; on smaller stations, there may be a gravity wheel installed in a separate orbital path, and visits are reduced to once a week for a longer period.

How Much Gravity?

As a rule, orbital personnel need at least one hour in a gravity wheel for every three days in zero gee to avoid deterioration. If the subject has not been in a gravity field for more than a month, he will lose one point of BODY TYPE for every subsequent month period without gravity.

Example: Your Body Type is Strong (8). You are on a zero gee station for four full months. By the second month, your Body type has dropped from 9 to 8. By month three, you have dropped to 7 and an Average body type. When your body type drops to 0, your circulatory system is in serious danger of collapse (80% per month).

OTHER ALTERNATIVES

Although many small habitats cannot support a gravity field, the larger ones are able to generate up to 0.5 gee through use of huge, ferris-wheel carousels. These spinning wheels create gravity through centrifugal force, which holds things to the bottom/outside edge of the wheel.

However, carousels have one major drawback. With centrifugal force comes the



coriolis effect—a sideways motion created by the wheel's spin. In a small environment, this force is powerful enough to cause dizziness, nausea and sometimes physical damage.

The larger the diameter of spin, the less the coriolis effect. The minimum radius to achieve .5 gee without side effects is about 1000 feet (300m). Many small stations get around this problem by placing their gravity habitats on the end of extended tethers or booms, much like swinging a bucket on the end of a rope. Elevators carry crew from the central weightless core out to the spinning living modules and back again.

SPACE SICKNESS

Besides the problems with calcium loss and circulation damage, there's a more immediate problem faced by any Groundsider *Cyberpunk* character. Space sickness.

Feelin' Queasy Yet?: Roll 1D10. If your roll is 7 or better, you are immune to space sickness. On a roll of 5-6, you will occasionally feel discomfort, but this will pass within 1D6/2 weeks. On a roll of 4 or lower, you cannot adapt. You are ill all the time, and must be sent to a gravity environment.

If you were born in space (age 17 or lower), you have an automatic +4 bonus to this roll. If you are an experienced spacer, you receive an automatic +1 bonus for every year you've been in orbit, up to 4 years.

With gravity wheels and drugs, we can lick the physical aspects of zero gee. But the greatest problem with gravity is psychological.

MIND OVER MATTER

In the earliest days of space exploration, the mental problems of weightlessness weren't readily apparent. Most astronauts were experienced in strange environments and had some simulation of zero gee through special water tanks and free fall experiments. Besides, the problem of hanging upside down in mid-air is negligible when the entire area is less than six or seven feet high.

But the twenty-first century changed this. For starters, most of these new space travellers weren't trained scientists and pilots—they were corporate execs, lab researchers and so on. Adapting to null gravity was far more of a problem for these civilians. Some became dizzy, disoriented and "spacesick". Others experienced constant anxiety without a readily identifiable up or down.

Meanwhile, an entire generation of colonists were growing up in space; adapting their homes and workplaces to its conditions. These new spacers thought nothing of hanging upside down over a thousand foot hangar bay to work on an exposed panel; they'd been doing things like this their entire lives. Although they dutifully took their pills and did their gravity-wheel therapy, most didn't think about up or down at all.

The first spacers had required special webbing to keep themselves from drifting out of their bunks. The second generation didn't even use bunks half the time. In a habitat, it became common for a two year old to curl up wherever he happened to be, snag a handhold, and reflexively hold himself at station while sleeping. As these generations matured, they began to shape their environment to fit. Huge, open spaces were thrown between areas of a habitat, without thought of bridges or catwalks. Corridors had moving handholds installed to tow people from place to place. Elevators, stairs and ladders disappeared from construction. Chairs were mounted on any convenient surface, or not used at all.

The result? An environment designed to scare the living daylight out of a gravity-raised, gravity-loving Groundsider.

PSYCHOLOGICAL EFFECTS

Cyberpunk characters coming from Groundside have a serious adaptation problem facing them. They will find themselves plunged into an environment where up and down don't exist and nothing is arranged to facilitate a sense of gravity. Instead, tech meetings may be held suspended hundreds of feet up in huge hangar bays, dinner parties may have guests floating languidly at all angles, and an

open corridor may suddenly open across a bottomless airshaft. And combat—! Forget it.

A NEW SKILL: Zero Gee Maneuvering

This skill is the ability to maneuver in low or zero gravity conditions. It allows a character to kick off surfaces and catch himself on the rebound, make turns or flips in mid-air by body movements, and to hold position if needed. Orbital characters automatically have this skill at +6, and may buy it at higher levels using IP.

In order to acquire Zero Gee Maneuvering, you must first get used to the conditions of weightlessness. This isn't easy for everyone. Each time a Groundsider character encounters a new condition of weightlessness, such as crossing an airshaft, finding himself suspended at a height without visible means of support, or some other sudden zero-gee shock, he must make a Cool roll (Cool + D10) higher than 10 or be momentarily paralyzed by fear for 1D6 turns. Until the character has successfully made five such rolls, he will be considered to be unadapted to zero gee and unable to master this skill. Once adapted, he need not make any further Cool rolls.

RECOIL

One problem in zero gee is that lack of gravity doesn't cancel out Newton's Third Law. A heavy caliber handgun can easily propel its user into the opposite wall, from recoil. While gyrojet weapons can reduce or eliminate this recoil, as a standing rule any player firing a recoiling weapon must make a REFLEX roll or be pushed backwards.

The player must roll a 1D10+ REFLEX total higher than 15 or be knocked off his feet. This +15 Difficulty is further modified by the following table:

RECOIL SAVE TABLE

Add modifier value to +15 base Difficulty Roll.

Small caliber (.22, .32)	+2
Medium caliber (9mm, .38)	+5
Hvy. caliber (.45, .44, .357)	+10
Any rifle caliber	+10
Any Automatic burst	+10
Body Type is Strong	-2
Body Type is Very Strong	-4
Velcro Soled Shoes	-2
Magnetic boots	-4
Braced Stance	-4

For every point the player has failed by, he is pushed back 1 meter opposite of the direction he has fired in. If he hits a wall he will take 1D6 in bludgeon damage. The character is also thrown into an uncontrolled spin (to recover requires a *AVERAGE Zero Gee Maneuver* roll). *Example: Scarv fires a .357 magnum at a target fleeing down the corridor. He fails his Recoil Save by four points, and tumbles back four meters (about 12 feet). Unfortunately, the wall is only two meters behind him. He hits solidly, taking 2D6 in bludgeon damage to his torso.*

NEW SKILL: Zero Gee Combat

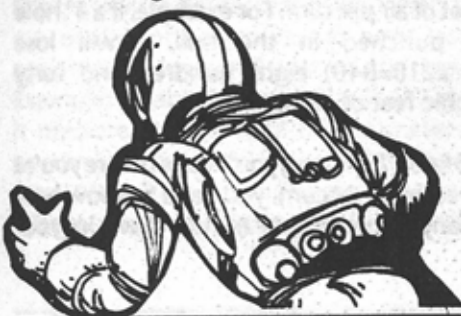
This skill assumes the player now knows how to use recoil weapons in zero gee (bracing against walls, etc. to prevent blowback), how to make punches and kicks in such a way as to keep close to the target, and how to use leverage to make throws and keep holds. When firing a recoil weapon, he may add this Skill to the required Recoil Save Roll. Orbital characters automatically have this skill at +2, and may buy it at higher levels using IP. This is not a maneuvering skill.

UNDER PRESSURE

The second leg of the Triad is Pressure. Pressure, to a High-rider, means

air. Spacecraft and space habitats must bring their own air into space with them, or manufacture it from the elements around them.

Air is probably the most important part of the Triad. You can survive without gravity for months, and it may be years before the next radiation storm, but without pressure,



NEAR ORBIT

THE ENVIRONMENT



you're dead in mere moments. Even without the factor of the freezing cold of space, an unsuited man will rupture like an opened soda and die horribly in about a minute.

Nothing galvanizes a Highrider like hearing the thin, shrill scream of pressure escaping from a habitat. Even the smallest child can clamber into a spacesuit or emergency life bubble in a matter of seconds. Nothing makes a Highrider madder than someone who has just done something stupid to puncture a pressure seal.

Something stupid like firing off a gun.

VIOLATING PRESSURE

It takes a certain amount of damage to violate a pressure seal. This is based on the **Stopping Power** of the hull itself, but walls and structures in space are not very thick. Materials are expensive and hard to come by; torque and thrust factors require a delicate balance between weight and acceleration. An Orbital transfer vehicle has a hull only mere centimeters thick—just enough to hold the air in and shrug off whatever minute particles strike it.

STOPPING POWERS

Space craft "skin"	7SP
Heavy Cargo craft	10SP
Station Hull	20SP
Workplatform Hull	10SP
L5 Colony Wall	300SP

There's another good reason why spacecraft hulls are so thin. When cosmic radiation (such as an alpha particle) hits metal and passes right through, the radiation damage is fairly negligible. But if the radiation hits and only partially passes through, it breaks up, or "cascades" into nastier secondary radiation. In short, you either want to stop all radiation (as in a rad shelter), or let the harmless stuff pass through easily.

Luckily, space is pretty empty. The chances of a micrometeor hit are almost one in a thousand, while the chances of a serious encounter are even slimmer. The greatest danger in space is from Man himself. Every year, more junk is thrown into orbit, where it waits for a possible collision.

Then there's always some idiot who decides to fire a heavy caliber hand weapon off in a habitat. While guns are severely restricted in space, and are in fact illegal on space transportation, this doesn't stop the more enterprising solos. Every so often, some Groundside yahoo tries to get away with a handgun assassination in a pressurized area, and ends up killing himself, his target, and several other people as his slug punches through a wall.

Solos who do this and survive are usually thrown out an airlock. Without a suit.

It doesn't end there. Here's an example: Say you fire a 45 caliber burst off through a space station hull. Assuming it penetrates the wall with any force, it will continue moving at the same velocity forever. If the station is in a geosynchronous orbit, and the burst is fired downrange, it not only has its own momentum, but that of the station as well. A little while later, an OTV comes uprange from Earth. Moving at several hundred miles per hour, it hits your bullets and its thin hull is ripped through. Two dozen construction workers die as their cabin evacuates to open space.

Remember. Guns are not welcome in space. Bring a knife instead.

PENTRATION DAMAGE

With air screaming out into vacuum, how big a hole is made becomes the critical factor. To calculate this, use the following formula:

For every point of penetration, a 1" diameter hole is opened in the hull. Example: I fire a gyrojet in a spaceplane, doing 18 points of damage. 13 get through. A 13" hole is opened in the hull.

EVACUATION TIME

For every 1" of hole, you will lose 210 cubic feet of air per turn. For example, if a 4" hole is punched in the hull, I will lose ($4 \times 210 = 840$) eight hundred and forty cubic feet of air per turn.

To know how long you'll have before you're breathing vacuum, you need to know how many cubic feet of air you have in your

enclosed area. This is simplified by the fact that most space habitats are cylindrical in design. The general rule is:

3.14 TIMES (LENGTH TIMES RADIUS SQUARED)

For example, a 100 foot cylinder with a 30 foot diameter has 70,697 cubic feet of air. We have made this simpler by showing the standard module sizes and pressures for these units.

STANDARD VOLUMES & SIZES

Habitat Module 50'x14'
..... 7,697 cu/ft

Lab/Workspace 100'x30'
..... 70,686 cu/ft

Airlock 10'x10'
..... 785 cu/ft

Shuttle
Cargo Bay 60'x15'
..... 10,603 cu/ft

Shuttle
Flight Deck 14'x10'
..... 1,100 cu/ft

Spaceplane
Flight Deck 14'x10'
..... 1,100 cu/ft

Spaceplane
Main Deck 110'x10'
..... 8,639 cu/ft

Orbital Torus 5,200'x150'
..... 9,330,530,022 cu/ft

L5 Spin Colony 52,800'x21,120'
..... 18,497,439,869,500 cu/ft

These volumes are normally written on the inner and outer faces of space vehicles or living spaces in fluorescent paint. When 1/4th of the total pressure has been lost, automatic sensors will seal off the area. Example: a habitat module has 7,697 cu/ft pressure. It takes a hit from a meteor, opening a 4" hole, and losing 840 cu/ft per turn. After @1,9245 cu/ft have been lost (about two turns), the doors automatically

slam down and seal the habitat module off. Hopefully, by this time the inhabitants have either cleared out or are in spacesuits.

Maintaining a seal is most important part of the pressure leg of the Triad. There are a number of emergency solutions to this.

Goop Balls: Ping pong sized plastic spheres filled with a sticky white fluid. When exposed to air, the goop hardens to a putty consistency, filling the hole. One good ball will cover a 2" hole, and most spacers carry six or seven stashed in their pockets at all times. 0.2 Euro apiece.

Slap Patches: These are folded circles of sticky-sided plastic with a foil backing. They cover a 1 foot area. The backing is peeled away and the patch applied. Most spacers have one or two on hand in any room of a habitat. 5 Euro each.

IF THE PATCH FAILS

Assuming the pressure seal is violated by a hole, a Referee must next take into account the effects of dropping air pressure on the players. Checks must be made at three times; Half Volume, Quarter Volume and Zero Volume.

Half Pressure: At one half normal volume, the air in the area is becoming thin and hard to breathe. Characters must make a roll against an average task, using their Body Type and a 1D10 roll, or pass out until pressure is restored. Space-born characters have an automatic +4 bonus to this roll, as most have lived in lower pressures all of their lives.

Quarter Volume: At one quarter of normal volume, all characters automatically pass out (this may seem strange until you recall that most space habitats are pressurized at about two thirds Earth sealevel to begin with). After three minutes, they will lose 1 point of INT for every additional three minutes of 1/4th volume (brain damage from hypoxia). When pressure is restored, they may roll 1D6/2 to see how many points of lost INT are reversible.

Example: Scarv's stray shot rapidly empties

SO YA WANT IT IN METRIC?

Many people (particularly Euro-Cyberpunks) use something more scientific than the U.S. feet and pounds. Here are some conversions for determining sizes of colonies, etc:

1 inch = 2.54 cm
1 mile = 1.6 km
3.2 feet = 1 meter
1 cu/ft = 28.3 liters

the tiny lab space he is in. In a few moments, the pressure is down to half. Scarv makes a roll to stay conscious. He fails and passes out. Luckily, Scarv's companion Lorani makes her roll. She is able to get a slap patch over the hole just as quarter pressure is reached, and she passes out herself.

Moments later, a rescue party makes it into the lab, pumping new pressure into the compartment. Both Scarv and Lorani have lost three points of INT (as Scarv isn't too smart to begin with, he is now at 2— somewhere about the level of a cabbage). Both players roll 1D6/2 to see how many points they recover. Lorani gets a full three points back, but Scarv is only able to get back one. With his 3 points of INT, Scarv is now content to say "Duh?" a lot and wait for orders.

Zero Volume : At zero volume, the compartment is airless. The players will die unless they get air soon. They will automatically lose 1D6 points of INT each turn in addition to whatever INT they have previously lost in the drop from one quarter to zero volume.

When INT has reached 0, the players are dead, dead, dead. Their blood begins to fizz like soda pop. Huge bruises cover the face, chest and extremities. Blood spurts out of eyes, nose, ears and mouth.

If the character has been holding his or her breath (a logical hedge against asphyxiation), on the third turn their lungs explode rather messily.

RUNNING OUT OF OXYGEN

Death from the Pressure leg of the Triad isn't restricted to the airless wastes of space. A character can also run out of oxygen. Pressure is still normal, but the air cannot support life. The character suffocates.

Because there is no loss of pressure, running out of oxygen has slightly different rules for play, based on how much air is left:

About a hour's worth left: Air is hard to breathe, foul. INT, REF and COOL are reduced by 3 points, but not permanently.

Oxygen almost gone: Characters must make a roll against an Average task, using their Body Type and a 1D10 roll, or pass out until they get new air. Space-born characters have an automatic +4 bonus to this roll, as most have lived in lower pressures all of their lives.

Oxygen gone: All characters automatically pass out. In addition, they will automatically lose 1D6 points of INT per turn in addition to whatever INT they may have previously lost. When INT has reached 0, they are dead.

RADIATION

The final leg of the Triad is Radiation. Radiation consists of tiny atomic

particles which pass invisibly through the human body, leaving chaos and damage in their wake. Radiation can alter cell structure (causing cancer), damage DNA inside reproductive cells (mutations), or just plain kill the cells exposed.

Radiation is measured in millirads and rads. Although a full radiation measurement is a rad, radiation dosages are usually measured in millirads (1/1000th of a rad), because a full rad of radiation is a very severe dose. Over a spacer's lifetime, he will accumulate hundreds of millirads.

When a Groundsider thinks of radiation, he thinks of nuclear bombs or mutant monsters from the movies. A Highrider knows that radiation is far more subtle. Every living thing continuously undergoes some form of radioactive bombardment, whether from cosmic rays or solar exposure. This exposure mounts up until the organism is severely damaged or dies.

There are three major radiation sources in space. These are

- 1) Cosmic and background radiation.
- 2) Nuclear power plants.
- 3) Solar flares.

Cosmic rays are tiny particles which constantly bombard through space. Over a

lifetime, a person continuously absorbs tiny amounts of these radioactive particles, which, added up, cause damage and minor level genetic mutations. **Power plant radiation** is very intense and very lethal. **Solar flares** are very short and incredibly intense (although solar storms may last longer and with less intensity).

HOW MUCH DAMAGE CAN YOU TAKE?

A *Cyberpunk* character can take up to **50 rads (50,000 millirads)** before he is seriously damaged. On the **NEAR ORBIT/CYBERPUNK Hardcopy Form** provided in this supplement, there is a place to tally the amount of radiation the character has taken over a lifetime. This total is your character's **radiation history**, and is used to check for radiation damage over his life.

Radiation damage is very subtle — most effects, like cancer or mutations, are impossible to instantly apply to a character. Instead, the Referee must use his or her best judgement on the best way to integrate these factors into the game. For example, characters with cancers or severe rad sickness might take minuses from their REF and BODY TYPE stats, while those with reproductive damage may become sterile. All of these should depend more on Referee discretion than on dice rolling.

RADIATION SICKNESS TABLE

Total Dose	Results
60-70 rads	Minor, treatable Lymphatic cancers
71-80 rads	Mutations, reproductive damage, serious cancers.
81-90 rads	Inoperable cancers, bone degeneration
91-100 rads	Skin peeling, fatal cancers, hair falls out, nausea
100+ rads	Burns, nausea and death within 1D6 hours.

Although there is no way to lower a character's radiation total, the worst results can be stopped or reversed through drugs, therapy and surgery.

Two types of damage deserve further attention: **Cancer** and **Mutation**.

CANCER

This is the worst side effect of radiation damage. It is up to the Referee to determine the effects of a radiation-caused cancer, but in general, the following rules apply:

1) The chances of the player **discovering** a cancerous tumor increase 2% every month. If a physician is looking, add an additional 30% to discover it.

2) An **inoperable cancer** will kill the player within 2D10+4 months. Surgical treatment, chemotherapy, or even radiation treatment results are up to the Referee.

A cancer may automatically go into **remission** (10% chance). This should be rolled each month following the cancer's discovery. With any type of therapy, this percentage is raised to 40%. For each month in remission, the player adds one month to his originally rolled life expectancy.

MUTATION

Mutations in real life (unlike the *Marvel Comics* version) don't allow the player to change himself. No, the nasty part of mutation is that it effects your *offspring*. A few years after a stiff dose, your kids may be born with birth defects, strange aberrations, or even dead.

The most dangerous part of mutation is that most of the time, it's not very favorable. Most mutations are so random that they are ultimately harmful. If mutation occurs in your Rad history, roll 1D10:

MUTATION TABLE

1	Favorable (Referee determines).
2-3	Harmless, no effect.
4-7	Harmful (lose 1D6) points from random 1D6/2 Stats as determined by Referee).
8-10	Deadly (character dies at birth).

CANCER & YOU

Okay, so the cancer rules are fairly general. Do you really want to play Treatments and Tumors? In most cases, characters will either take enough of a dose in a flare or power plant accident to make worrying about the long term effects silly. When you have a rad accident in *Near Orbit*, you usually end up glowing in the dark.

SPECIFIC RADIATION EFFECTS

COSMIC RAYS

Cosmic rays are measured in **millirads**. Normally, a human on Earth takes about 250 millirads a year. At this level, a man could live two hundred years before he reached the 50 rad danger limit. However, in space, there's no thick blanket of ozone to shield humans from this bombardment (on Earth of 2013, there isn't much ozone either, but there's still more than in space). Within the thick walls of an orbital colony, enough protection can be provided to drop the bombardment rate to nearly zero, but the thin hulls of spacecraft or spacesuits can't stop this constant penetration. In short, every time you go outside of a workshack, orbital colony or dome, you will take some cosmic ray damage.

Cosmic ray exposure: For every hour you are exposed to cosmic radiation, roll 1D6. Remember: cosmic rays are measured in millirads.

POWER PLANTS

Under normal circumstances, most Groundsiders will never encounter the results of a nuclear accident. On *Cyberpunk* Earth, exposure to weapon or power grade radioactives happens only when a nuclear power plant leaks or a weapon is dropped (the radiation from X-rays is so minor by comparison that we rate it like cosmic radiation, with a 1D6 millirads of exposure for every minute under the X-ray machine). Oddly enough, this doesn't happen as often as one might think. Radioactives are expensive and the Corporations hate waste.

But in space, there are hundreds of small nuclear reactors going all the time, powering satellites, space probes and workshack electrical generators. Deep space ships have enormous powerplants designed to power them across the Solar System. Any one of these reactors can, at any time, develop a crack or breakdown that will expose a crew to nuclear radiation.

Powerplant Radiation exposure: Nuclear radiation kills fast! For every turn of exposure, roll 1D10. This damage is measured in **rads**, not millirads! A ten minute exposure could pack enough radiation to kill a character rather horribly (think how fast Mr. Spock went down in the movie *Wrath of Khan*).

Powerplant radiation can be protected against by wearing special lead shielded suits. These suits have an RSP (Radiation Stopping Power) against radiation of 6 points per turn. *Example: I enter a breached reactor vessel to shut it down. This emergency task will take me about six turns (about a half minute) to accomplish. I roll my exposure; 10, 7, 8, 5, 1, 8. Normally, I would have taken a total of 39 points just crossing the room. However, with my suits RSP, I took only a total of 9. The rest was stopped by the suit. Of course, if I stay in this position long enough, eventually I will take enough rads to cause some serious damage.*

Mr. Spock should have put on a rad suit.

SOLAR FLARES

The Sun is an fusion reactor smack in the middle of the Solar System. Though prone to occasional power fluctuations from time to time. When the output of energy peaks, it creates a deadly wave of radioactive particles which sleet through space. This is a solar flare. A solar flare can kill you almost as fast as a nuclear power plant, generating as much as 60 rads in a six hour period. During a solar flare, there's only three safe places to be— on Earth, under lots of shielding on an orbital colony or under the Lunar surface.

Occasionally, players will find it impossible to get to safe ground, particularly if they are living on a workshack. This is why most (80%) of all smaller stations have a small, heavily shielded chamber designed to shelter up to 20 people from a solar flares. This "tornado cellar" has sufficient food, water and air for up to twenty days, but it's incredibly small and mindbogglingly dull. Many "cellars" have installed braindance systems (see *Rockerboy*) to keep the occupants from killing each other during a long flare.

PREDICTING FLARES

Flares can last for days. The trick is predicting when they will occur and for how long. Flare occurrence is based on a percentage roll. The base roll is 5% per month, increasing 5% each month until a flare finally occurs (at this point, the percentage drops back to 5%). The Referee rolls once per game month.

When a flare is predicted, the Referee must next determine its duration and date of occurrence:

1) Roll 1D6 and check the chart below for the period of days during which the flare will start.

2) Roll 1D10/2 (round down) and count from left to right to determine which day the flare begins.

3) Roll 1D10 to determine length of the flare in days.

FLARE PREDICTION CHART

Roll	Date
1	1, 2, 3, 4, 5
2	6, 7, 8, 9, 10
3	11, 12, 13, 14, 15
4	16, 17, 18, 19, 20
5	21, 22, 23, 24, 25
6	26, 27, 28, 29, 30*

*Note: If month is February, reroll, any 29, 30 results. If month has 31 days and roll is 30, roll 1D6. On an even roll, date is 30th, on odd, it is 31st.

Flare exposure: Flares generate rads, not millirads. During the flare, roll 1D6 for each exposed player per hour exposed.

A SELECTED SPACE SCIENCE BIBLIOGRAPHY

For more information on the technology of space, here are just a few sourcebooks available at your local library or bookstore.

Pioneering Space

James E. Oberg & Alcestis R. Oberg
McGraw-Hill Books

Pioneering the Space Frontier

Report of the National Commission on Space
Bantam Books

Living In Space: A Manual For Space Travellers

Peter Smolders
Tab/Aero Books

Space Traveller's Handbook

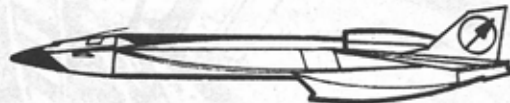
Michael Freeman
Sovereign Books, New York.

Advanced Technology Warfare

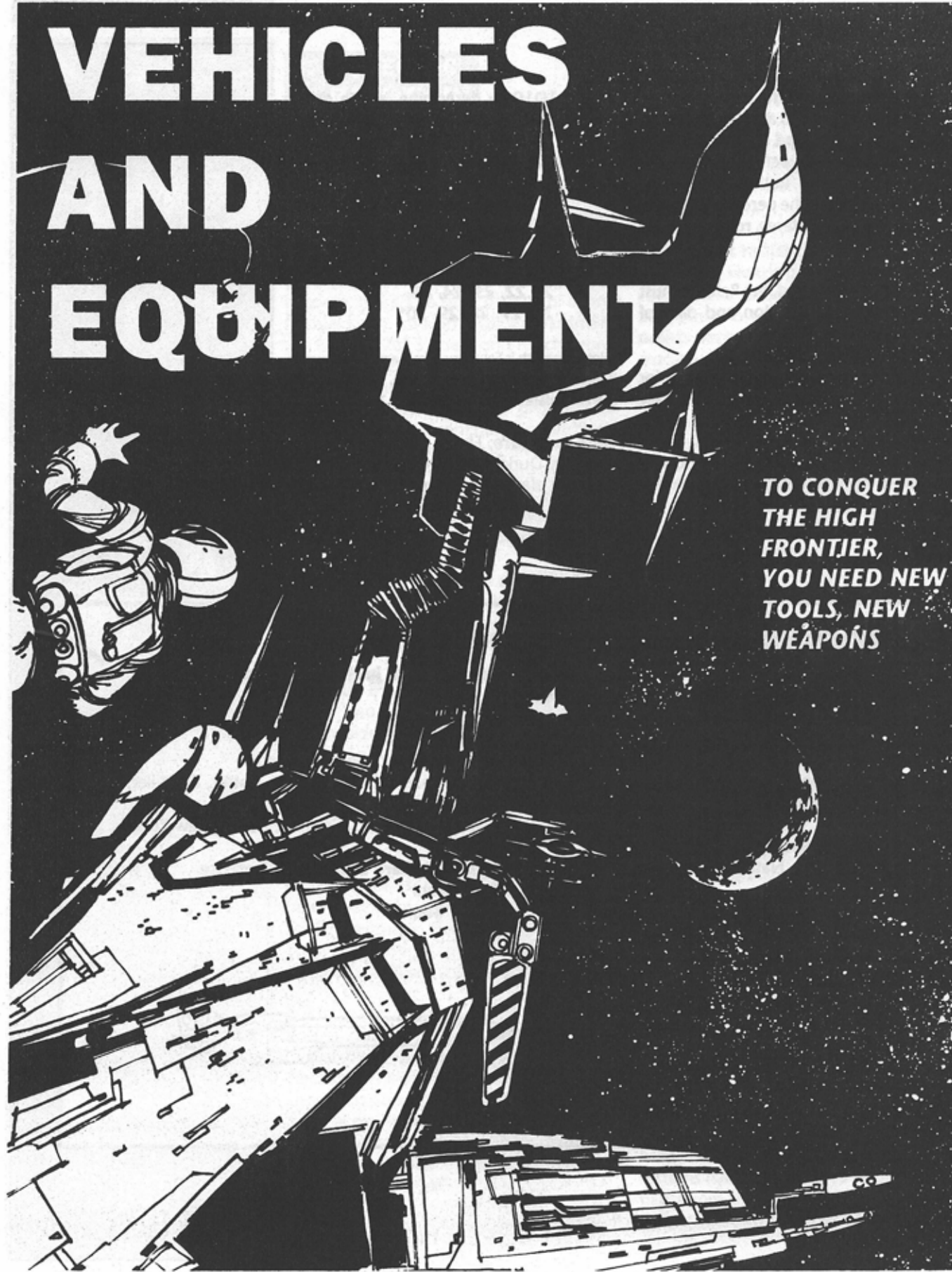
R. Friedman, W. Gunston, D. Hobbs, D. Miller, D. Richardson, M. Walmer
Salamander Books/Crescent Books, New York.

Space Warfare & Strategic Defense

David Pahl
Exeter Books



VEHICLES AND EQUIPMENT



TO CONQUER
THE HIGH
FRONTIER,
YOU NEED NEW
TOOLS, NEW
WEAPONS

THE HARDWARE

There are four types of vehicles used in space.

These are

Surface to Orbit, Orbital Transfer Vehicles, Surface to Space and Deep Space vehicles. Each type of spacecraft is designed for a particular job and environment.

SURFACE TO ORBIT

These include Rockets, Shuttles, Mini-shuttles, Trans-

atmospheric Spaceplanes and Deltas.

ROCKETS

These are any sort of rocket-powered lifting vehicle. Usually used for transporting cargo, they are expensive and rarely reusable. Most Rockets are designed to perform two services—to lift cargo into orbit, and once in orbit, be converted into living space. Common rockets are the EuroSpace Agency's *Ariane III*, the Japanese *Hiyaku V*, and the U.S. *Saturn*, *Titan* and *Delta* types. The largest rockets are the monster Soviet designs, leased to the EuroSpace Agency on occasion.

The most common type of commercial rocket used is the **HMLPV-15** (High Mass Lift Profile Vehicle) developed by Orbital Air. HMLPVs are robot controlled, extremely cheap solid fuel rockets designed to get a huge amount of mass into space. They are nothing but engine and cargo hold, with a reusable scramjet booster section designed to get the main rocket into a higher orbit.

SHUTTLES

These are vehicles which are launched from either a rocket (such as the current US space shuttle) or carried piggyback by a lifting platform. Shuttles are used to carry work crews into orbit at altitudes higher than a normal Spaceplane could go, and are also large enough to carry substantial cargo. There are three types of shuttles in use in 2013: the standard NASA *Shuttle II* from the late 1980's and 90's, the almost

identical *KosmoSov Shuttle* from the 90's, and the *Hermes I* mini-shuttle, designed primarily for carrying construction crews.

TRANS-ATMOSPHERIC VEHICLES (SPACEPLANES)

TAVs are capable of reaching into Low Earth orbit using a combination of three engines. One engine allows the plane to take off like a normal jet. The second propels it at hypersonic speeds to the edge of space. The third engine is a pure rocket, allowing it to move in space. TAVs are not designed for deep space travel. They can reach to the lowest ranges of LEO, where they dock with a Workstation and transfer cargo and passengers to an Orbital Transfer Vehicle, then reenter. There are two current models of spaceplane: the American designed *Orient Express* (rarely seen, as only 10 were constructed), and the more common *Hermes II* spaceplane (based off the *Orient Express* design, but built by the EuroSpace Agency).

DELTAS & CRUISERS

These are high speed, suborbital spaceplanes designed for combat and interception. They usually have two engines: a normal supersonic jet for reaching an altitude of 100,000 feet (30km), and a rocket engine (solid fueled), for boosting into orbit. Occasionally, deltas are carried piggyback by larger jet aircraft, or boosted into orbit by using disposable rockets.

Once in orbit, deltas use maneuver thrusters to move in on orbital targets. Well armed with chemical lasers, air to air missiles, ASAT missiles for satellite warfare, and kinetic kill mines, deltas must strike quickly and then use their remaining fuel to reenter safely. The EuroSpace agency has only a few deltas (12)—in the main, they are used by the USAF (124 total) and the Soviets (56 total).

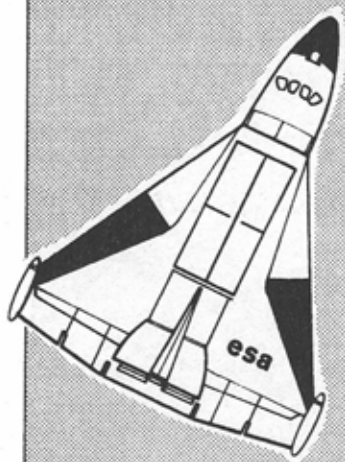
ORBITAL TRANSFER VEHICLES

OTVs are used to move from Low Earth Orbit to High Orbit, or between LEO and

the La Grange points. There are four types:

UPCOMING IN THE NEAR ORBIT SAGA

Deep Space Ships and long term missions are the subject of a future DEEP SPACE supplement for *Cyberpunk™*. Set in 2015, this supplement will cover advances in space tech since the 2013 start date. Also planned: maps of O'Neill One and the Lunar Colonies. Stay tuned.



Cargo OTVs, Passenger OTVs, Deep Space OTVs and Work Modules.

CARGO and PASSENGER OTVs

These egg-shaped vehicles are used to carry cargo or passengers between orbital points. All engine and fuel cells, they also have spindly legs and wide docking rings for easy access. The EuroSpace Agency controls most of the C-OTVs and P-OTVs, although a few are used by the Soviets.

DEEP SPACE OTVs

These are much like normal OTVs, but use a second stage of egglike fuel cells for longer trips to the L-points and the Moon. These are refuelled at the L-points or left in orbit to be refilled at a Lunar station. Like the old Lunar Module from Apollo, DS-OTVs are used to land on the Moon, usually at the cities of Tycho and Copernicus.

WORK MODULES

These are small, one-man capsules with manipulator arms and rocket thrusters, used mostly in construction of orbital workshacks. Modules don't have enough fuel or supplies to make a run of more than a few hundred miles.

SURFACE TO SPACE

As of yet, no true Surface to Space ships exist. Plans have been drawn up to create a TAV-type vehicle with a three part engine and an orbit-based main drive section. The TAV would lift off from Earth, link with its main drive, and travel into deep space. So far, no working prototype has been designed. The Japanese look like the best bet for a breakthrough, with their scheduled *Minerva* class STS workhorse. The *Minerva* uses a hydrogen fuelled scramjet and a nuclear-heated drive pile to allow it to lift off, then makes a link with a long range fusion reactor and drive.

DEEP SPACE SHIPS

These are the true long haul vehicles of the Solar system. Most have are immense superstructures with rotating gravity carousels and massive nuclear engines. They are not exactly fast, but can maintain continuous boost for months, allowing speedy trips to Mars and the inner planets (about 6 to 8 months).

While on board a DSS, most of the crew remains in the state of "braindance"; bodies cooled down to near-freezing, while autonomic systems are controlled by direct nerve links to a central computer. A sensory "stim" is maintained while in the "dance", allowing the dormant crew to experience sensations and keep them sane—these links can even be shared, allowing an entire crew to share the same braindance (one way to deal with the long period of suspended animation is to run the entire crew as if in a braindance-based scenario).

Currently, there are three DSS class ships in existence; one is a Soviet exploration ship, the *Gagarin*, one is owned by the EuroSpace Agency (*DaVinci*), and one is a joint US-Japanese exploration ship (*Far Frontier*). Theoretically, none are armed, although all three can carry DS-OTVs and deltas in open-framework hangar bays.

NOTE: To change *Near Orbit* into a trans-solar scenario, merely add a "jump drive" which must be used at the edge of the Solar Gravity well, requiring an year long trip out and a year long trip back in.

OTHER METHODS

HIGH ENERGY LASER LIFT SYSTEMS (HELL)

These are small cargo rockets with a chemical fuel cell and a heat receptive base. Ground based lasers pump energy into the base, heating the fuel which lifts the rocket. There are three HELL systems in existence, one based in the U.S. at Colorado Springs, one at Shary Sagin in the USSR, and one in a EuroSpace Agency base in Dakar.

MASSDRIVERS

These are magnetic "rocket sleds" which hurl a capsule into Low Earth orbit. A massdriver handles cargoes of up to ten tons, usually in huge storage containers. They cannot be used for passengers as the G-shock is too high. There is one massdriver on Earth, running up Mt. Kilimanjaro in Africa—it is controlled by the EuroSpace Agency. There are massdrivers of larger sizes in Tycho and Copernicus craters; both are used to send materials back to Earth or to the L-Zones.

PERSONAL EQUIPMENT

SPACE SUITS

Without a spacesuit, you're not going anywhere in space. Modern spacesuits are designed to maintain a 3psi pressure both in breathing and body areas, as well as keep body temperatures within livable ranges despite environmental extremes of cold and heat.

There are two types of spacesuits commonly used in 2013. The EVA suit or Worksuit, is a heavy, shielded spacesuit designed for long exposure in space, much resembling the spacesuits of the 20th century. It has a Radiation Stopping Power of 3, and can keep a human comfortable in all space or Lunar environments for up to 6 hours. Price is about 20,000 Euro.

The Skinsuit or Light Maneuver Suit (LMS) is a very tight, rubberized coverall, with a helmet and a 40 minute air supply. Skinsuits are designed for short hops between workshack modules, quick walks across the Lunar terrain, or as protection for pilots. They are easy to get into (about three turns for an experienced Highrider), and relatively cheap (2,100 Euro).

The tight suit holds the body together against vacuum, and allows freedom of action. Pressure is distributed through the foam-like inner skin of the suit; this air is also heated at the same time, keeping body heat stable. Skinsuits provide little or

no radiation protection, and their limited heating and cooling units cannot stand full darkness or full sunlight for more than 10 minutes.

Most construction workers wear an LMS while working inside their work modules (miniature spacecraft resembling the work pods from *2001: a Space Odyssey*). The skinsuit protects the pilot from accidental decompression if his work module is breached.

EVA MANEUVER PACKS

These are specialized jet packs used to move personnel from point to point in zero-gee. There are three types:

The Hand Maneuver Unit is a CO₂ powered gas pistol, with maneuver thrusters on either side of a pistol grip. The HMU can move a man at a fast walking speed for 20 continuous minutes. Small enough to carry on the belt, HMUs are often used inside habitats. It takes a great deal of skill and practice to use these, as they require a person to be able to juggle speed and trajectories in head.

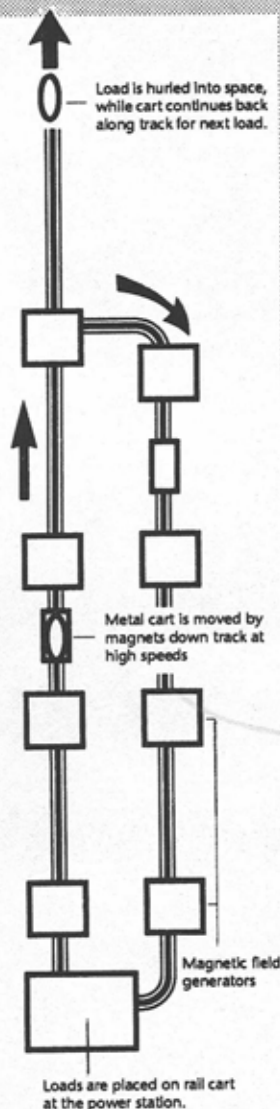
The Small Maneuver Backpack Unit is usually mounted on a spacesuit. Two extendable arms hold thrusters out to either side of the pack. The thrusters are powered by very small solid fuel rocket packs good for about 30 minutes of use. The SMU is controlled by a side-mounted small arm with a joystick mounted at the end.

The Manned Maneuver Unit (MMU) is a very large backpack, with two control arms, one on each side. Some are fueled by nitrogen gas, others by the same solid fuel units that power the SMBU. Bulkier and much heavier than the SMBU, the MMU system can provide up to 6 hours of movement.

EMERGENCY BUBBLES

The emergency bubble is a plastic environmental shelter designed to protect survivors of a pressure accident. They are found on all shuttles, spaceplanes, workshacks and OTVs.

Resembling a folded umbrella in its storage



MASSDRIVER

position, the bubble rapidly inflates to a large mylar sphere, one side opaque, the other side silvered. Through the core of the bubble runs a six inch thick metal rod, containing oxygen and oxy-scrubbers, a small water supply, a medical kit, a limited CO₂ maneuver thruster good for about 20 minutes, and a homing beacon with a 1,000 km range. The bubble inflates around the core in about three seconds. An extendable airlock allows the crew to enter.

There are three sizes of bubbles: one man, four man and six man. Each carries enough air and water to support it's crew for 24 hours (obviously, if a single man were to use a six man bubble, he would extend his survival period to six days). 150 Euro.

TOOLS

Tools used in space must take into account a wide variety of factors Earthbound tools can ignore. Using a normal screwdriver, for example, is nearly impossible in Zero-Gee, as the twisting motion will spin both screw and user. All space tools are therefore designed to be self-powered (using rechargeable battery packs and small motors) and to damp out effects of Newton's Third law.

Power Tools: These tools have small motors with rechargeable battery packs (packs are good for 4 hours use, recharge in four hours). Tools include:

Powerdriver with 15 changeable heads, including screwdrivers, socket wrenches and hex keys. The unit has a counterrotating adapter to compensate for lack of gravity. 100 Euro.

Vac-solderer with high heat tip and vacuum suction to pick up globules of stray solder. The vac-solderer also dispenses solder from a recess in the tip. 50 Euro.

Hand-held **Mini-Vac** for cleaning up after EVA, catching spills, etc. This model can handle both liquids and solids. 30 Euro.

Micro tools, including tiny screwdrivers, probes, calipers and other small electronics work tools. 15 Euro.

Combo flash with strobe flash in handle base, powerful adjustable beam in front, with velcro pad on one side, magnet on the other. 5 Euro.

Technical Scanners: These are small plug-in devices about the size of a paperback book. They are inserted into sockets built into control panels, walls and larger machines. Activated, they can (80% of the time) produce a detailed readout of the system's condition, repairs required, etc. 100-150 Euro.

Sniffer: Small handheld device which can be programmed to detect levels of CO₂, oxygen, carbon monoxide and other atmospheric gases (90%). If levels are higher than a set optimum, the sniffer will sound an alarm. Good way to know when the air is going bad. 20 Euro.

Pressure alarm: Tiny hand-held barometer monitors current air pressure, and will set off an alarm if pressure rises or falls by more than 5%. Good for detecting small leaks, most Highriders wear these on lanyards or clips. 2 Euro.

Radiation Meter: Gives a reading of radiation present in rads. Sweep covers immediate area within 5ft (2m). 100 Euro.

PERSONAL GEAR

A few common items used by everyone on the High Frontier:

Velcro: Two sided velcro strips or pads, one side with velcro, the other side adhesive. These are constantly used to secure things; books, pencils, tools, sleeping children. Most habitats have wide areas of velcro surfaces, allowing one to stick things down with a corresponding velcro pad. Get used to it— velcro is used on desks, chairs, walls, clothes— Space is filled with the constant "sccccrrriitttchh!" of velcro being pulled apart. 1 Euro for 12 pack.

Drink Bottle: Most Highriders have their own personal drinking bottle, usually plastered with nametags, stickers and other personalized bits. A squat cylinder with a straw in one end and a shorter self-sealing filler spout next to it, the drink bottle can be

fastened to convenient places with the ubiquitous velcro strap. Holds 22oz (650ml). 2 Euro.

LapPad™: A small, useful LCD pad with a limited computer chip memory. You draw or write on the pad with your finger or stylus, and it mimics the writing on its silvery surface. Press "save" and it stores the page, clears the screen. Press "recall", and it will present all the stored pages (up to 100) in reverse order or writing. Expensive versions have a keypad on the screen to allow typing. No pens to lose. 50 Euro.

Personal Radmeter: An inch long grey wafer with digital readout. Keeps a record of total dosage taken unless reset (press button on top). Can be worn clipped to clothing. 5 Euro.

Electro-Stick Pad: Hand held device with handle and battery pack on one side, and an electromagnet on the other. Will stick to any metal surface when switched on. 20 Euro.

Rail Key: Many large permanent work modules have a lightweight cable running through recessed slots in the wall. The cable is continually fed through pulleys, creating a trolley system in miniature. Cables run up and down module. The RailKey is a handle designed to snag onto the cable and tow the user to another area of the module. It lets go of the cable when the grip is released. 5 Euro.

Grip Slippers: Soft overshoes with velcro soles and magnetic heel plates. Good for traction in any zero-gee environment. 5 Euro.

Hands Free Comset: an earphone and boom mike headset, voice activated. Plugs into your spacesuit helmet. 30 Euro.

WEAPONS

Weapons in space have a number of special factors which must be considered in their design. In zero-gee, recoil is one critical problem. Another is random projectiles penetrating a thin habitat wall and letting the pressure out. While knives are the preferred (and socially acceptable) way

to eliminate the opposition, three "fixes" have evolved to allow use of limited firearms. These are:

GYROJETS

Gyrojets use a self-propelled rocket shell. A powerful spring launches the shell, which coasts about three feet from the barrel before igniting. No recoil, no mess.

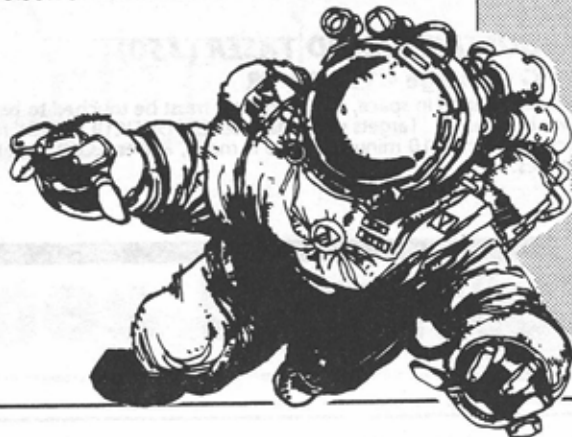
There are a couple problems with gyrojets. First, they are next to useless at close ranges, as the rocket shell is only spring powered. It takes at least a good twenty feet (5m) of travel before the round accelerates to killing speeds. In a spacehabitat, a potential assassin may be hard pressed to find enough space to make his gyrojet pistol useful!

Second, most gyrojets will penetrate the wall of a habitat without too much problem. Due to all of these factors, you can most reasonably expect to find gyrojets only being used outside habitats, or inside very, very large habitats like the Crystal Palace.

FLECHETTES & BOLTERS

Flechette weapons trade projectile speed for penetration. The flechette is thrown by a very low-powered shotgun-type round firing several flechettes at once. Bolt throwers are heavier flechette weapons which throw a single thick bolt.

Neither of these weapons can deliver enough impact to penetrate a hull, but because they are designed to pierce, they will halve the SP of any body armor they encounter. In space, where even a small rip is enough to send your enemy scurrying to a patch kit, big damage isn't quite as critical. Also, both types can be coated with poison or narcotics for added effectiveness.



NEAR ORBIT

VEHICLES/EQUIPMENT

SAFETY ROUNDS

Another solution to firepower in pressurized environments is to employ **safety rounds**. Designed in the 1980's for aircraft terrorist control, safety rounds will break up against even a thin metal hull. This makes them less effective against armor (halve damage damage when armor is present or when striking a wall). \$50 Euro for 100 rounds.

TASERS

Although not really a firearm, handheld

tasers are very popular in space. A flashlight like unit ends in two metal prongs. Press the prongs to flesh, and the subject takes a powerful and stunning shock. Ranged tasers are less common, firing two probes on the end of thin trailing wires up to 15ft (5m).

Tasers are even *more* effective in the Cyberpunk generation — a quick jolt to a metal cyberarm could short the whole thing out (10%) and make it useless up to the armpit!

WEAPONS

TEXAS ARMS 351 GYROJET PISTOL (\$420)

P • +0 • J • G • 9mm Gyrojet • 8 • 2 • UR

Developed as a lightweight gyrojet weapon along the lines of earlier MK II models of the 20th century, the 351 fires a 9mm rocket round (damage as normal 9mm). Range is twice that of a normal pistol in vacuum. The 351 is a commonly used military firearm, particularly on Luna.

HAMMER M-11 BOLT PISTOL (\$320)

P • +2 • J • P • 9mm Sabot Bolt • 10 • 2 • ST (Range 30 m)

The most common bolter in use, the M-11 has better recoil control than most flechette weapons. The 9mm bolt does 1D6 at all ranges, but armor SP is halved due to it's high penetration.

MILITECH SILVER SHADOW FLECHETTE PISTOL (\$300)

P • +0 • J • P • Caseless Fletchette • 8 • 2 • ST (Range 30 m)

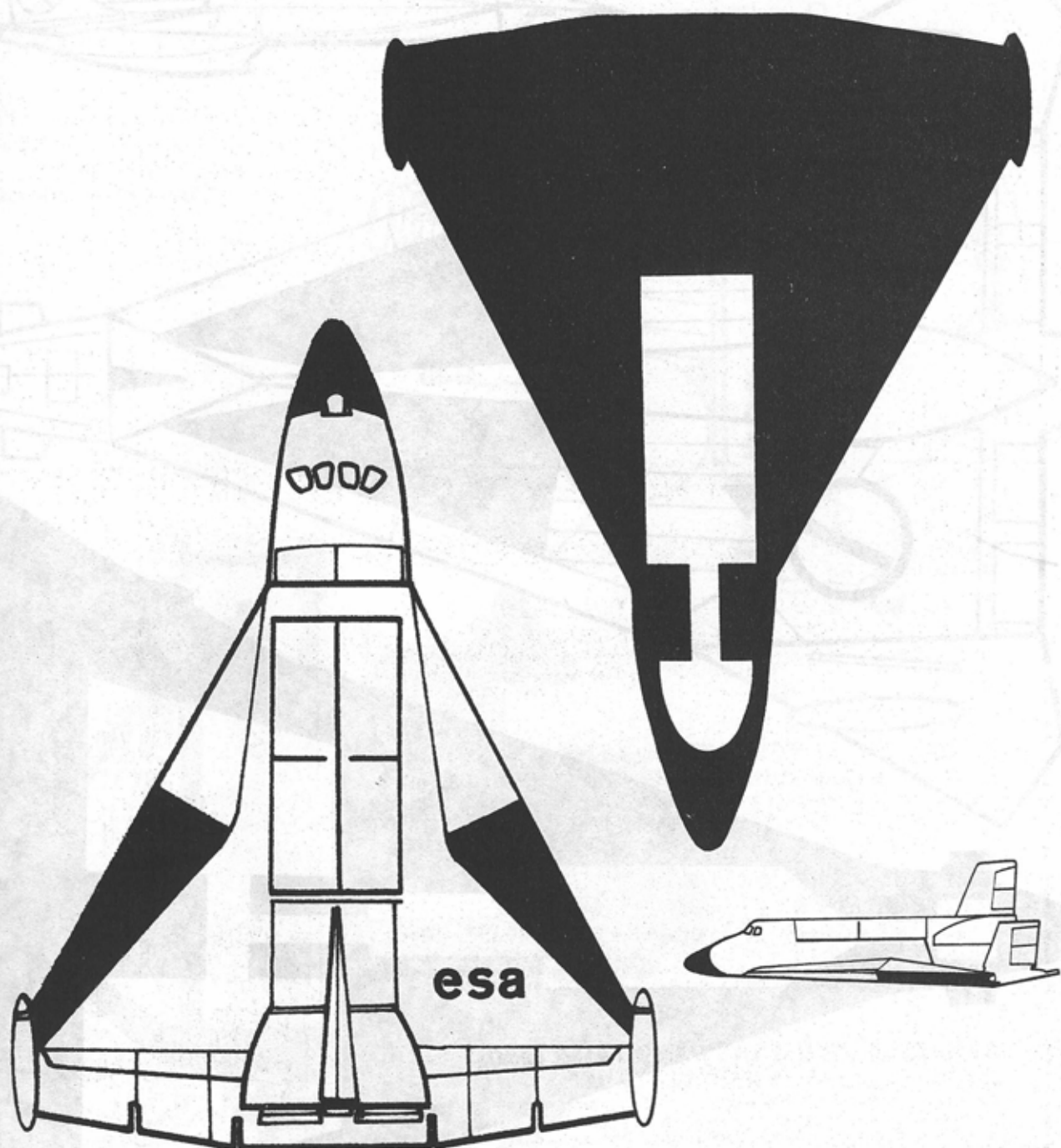
The civilian ancestor of the infamous "Black Widow" developed for the USAF. Each round has 6 flechettes with a half meter spread at medium range. Each shotgunlike shell holds 6 flechettes (roll 1D6+2 to see how many hit per shot). Each hit does 1D6/3 damage at all ranges.

DYNATECH INDUSTRIES HAND TASER (\$50)

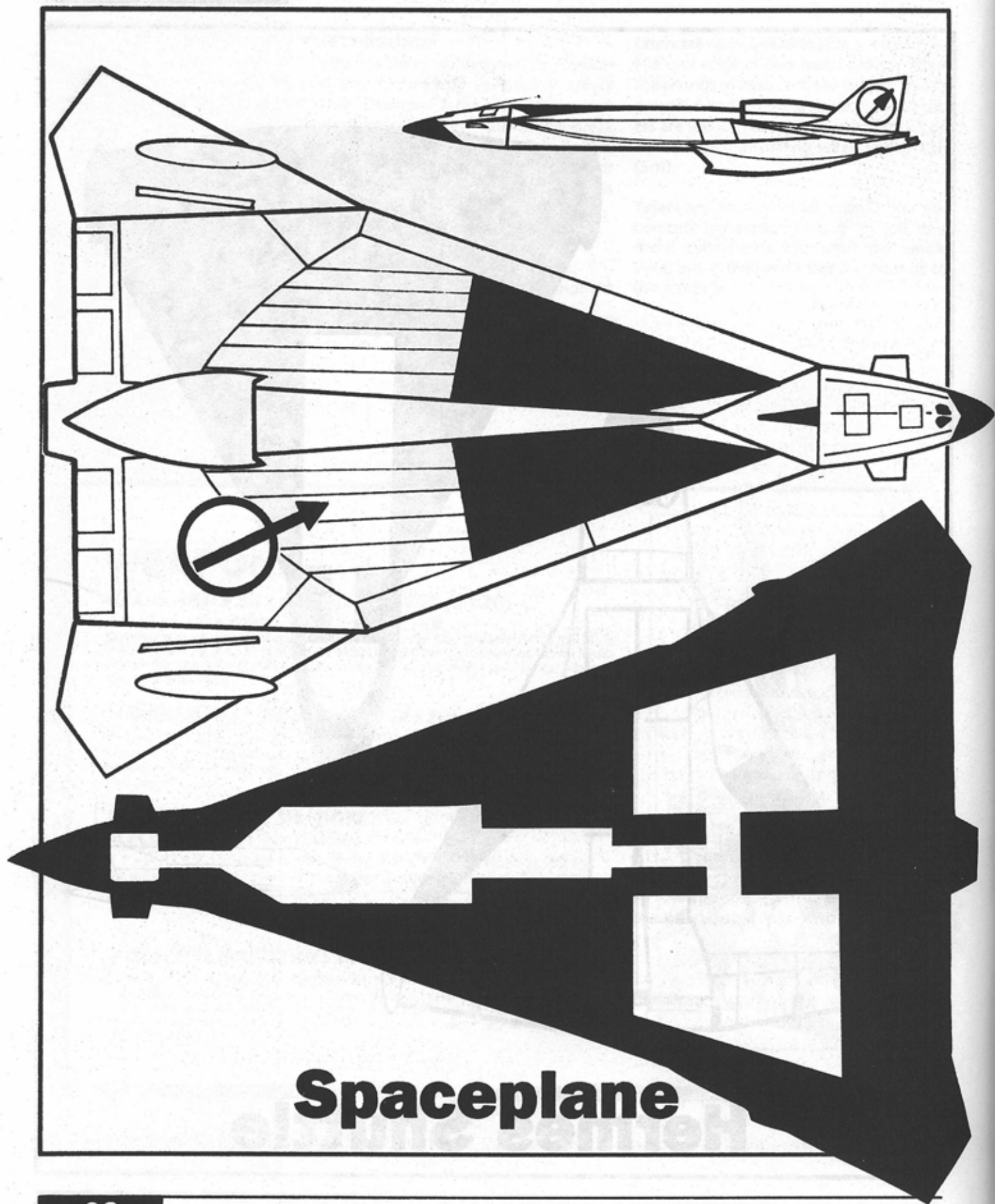
Special • +0 • J • G • Charge • 12 • 1 • VR

The most common taser weapon in space, the hand taser must be touched to bare skin in order to deliver it's charge. Targets must make a VERY DIFFICULT BODY roll or be stunned unconscious for 1D10 minutes. If save is made, REF & COOL are still halved for 1D10 minutes.

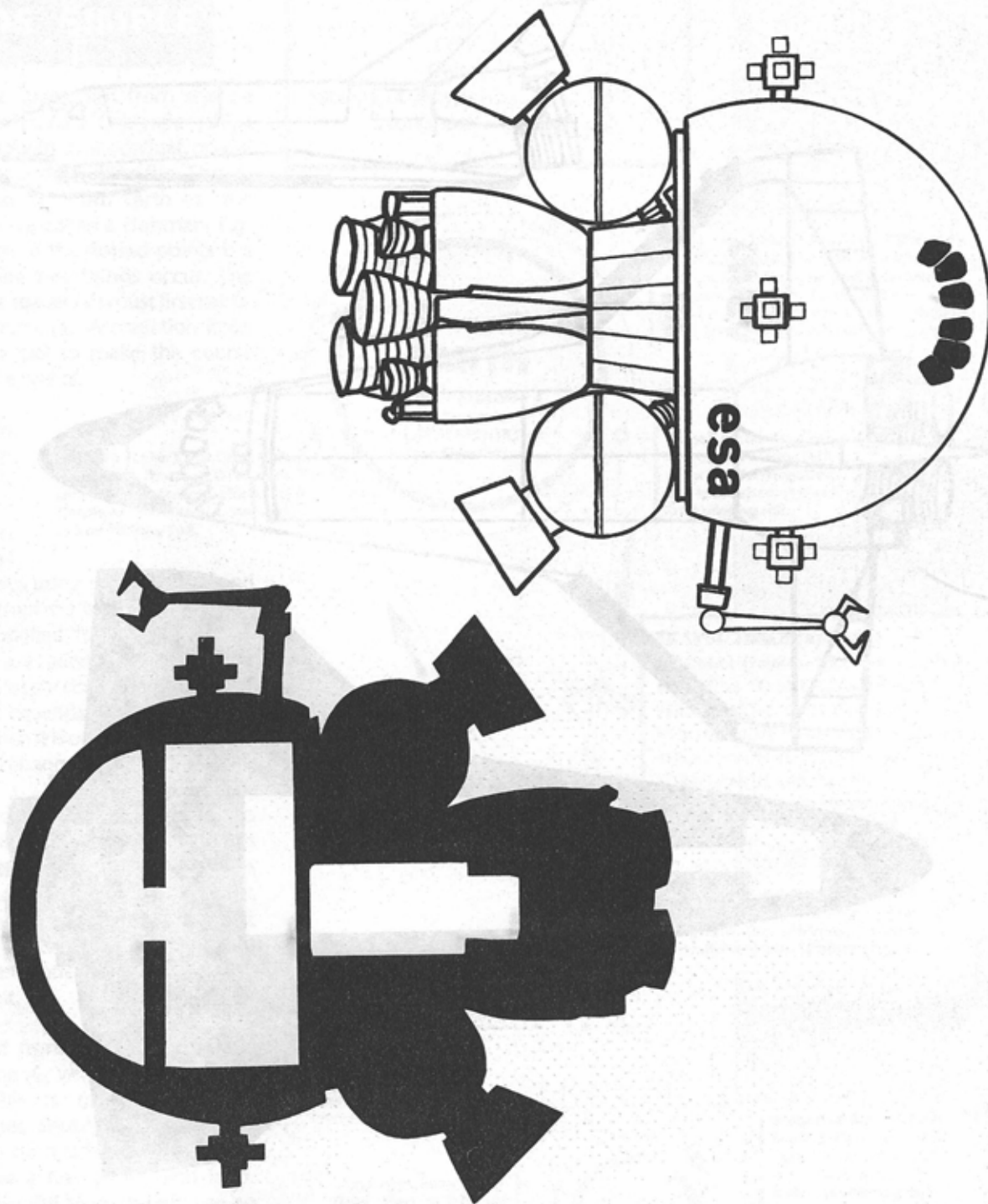




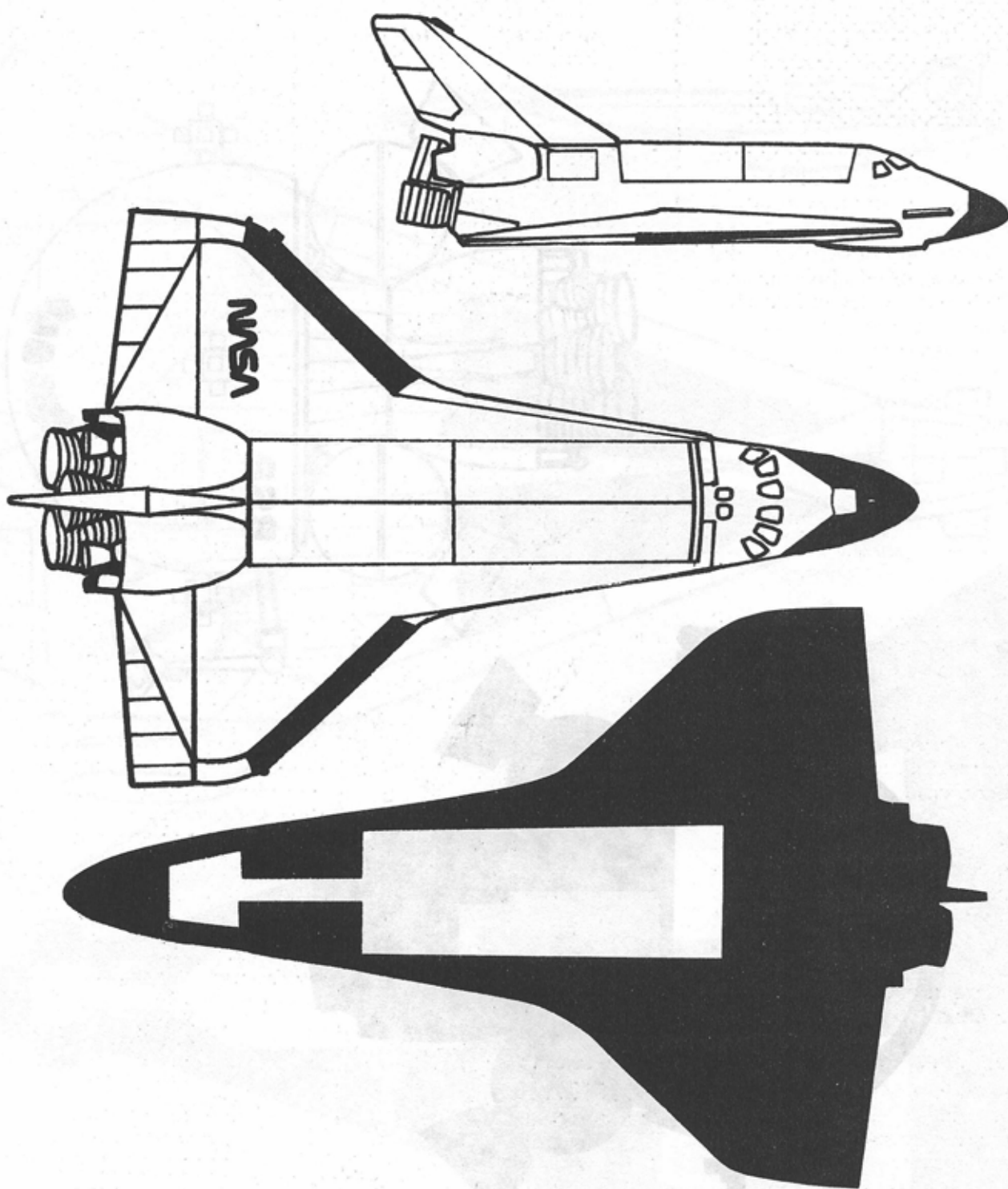
Hermes Shuttle



Spaceplane



Orbital Transfer Vehicle



NASA Shuttle II

SPACE NAVIGATION MADE SIMPLE

Unlike the spaceships from science fiction movies, Near Orbit spaceships have to deal with limits on fuel, orbital trajectories and breaking fire. Shown is a typical trip from Earth to the Moon (Luna), called a Hohman Figure 8. Each of the dotted points is a point where two things occur. The pilot of the spacecraft must first calculate his course (an Astrogation Roll), then burn fuel to make the course changes he wants.

Rather than deal with complexities like delta vee, constant boost versus using gravity wells, and other astrophysicists' nightmares*, we've simplified fuel consumption into what are called "burn elements". Every time a spacecraft makes a course change, it expends one burn element of fuel. When it is out of "burns", it can no longer change course.

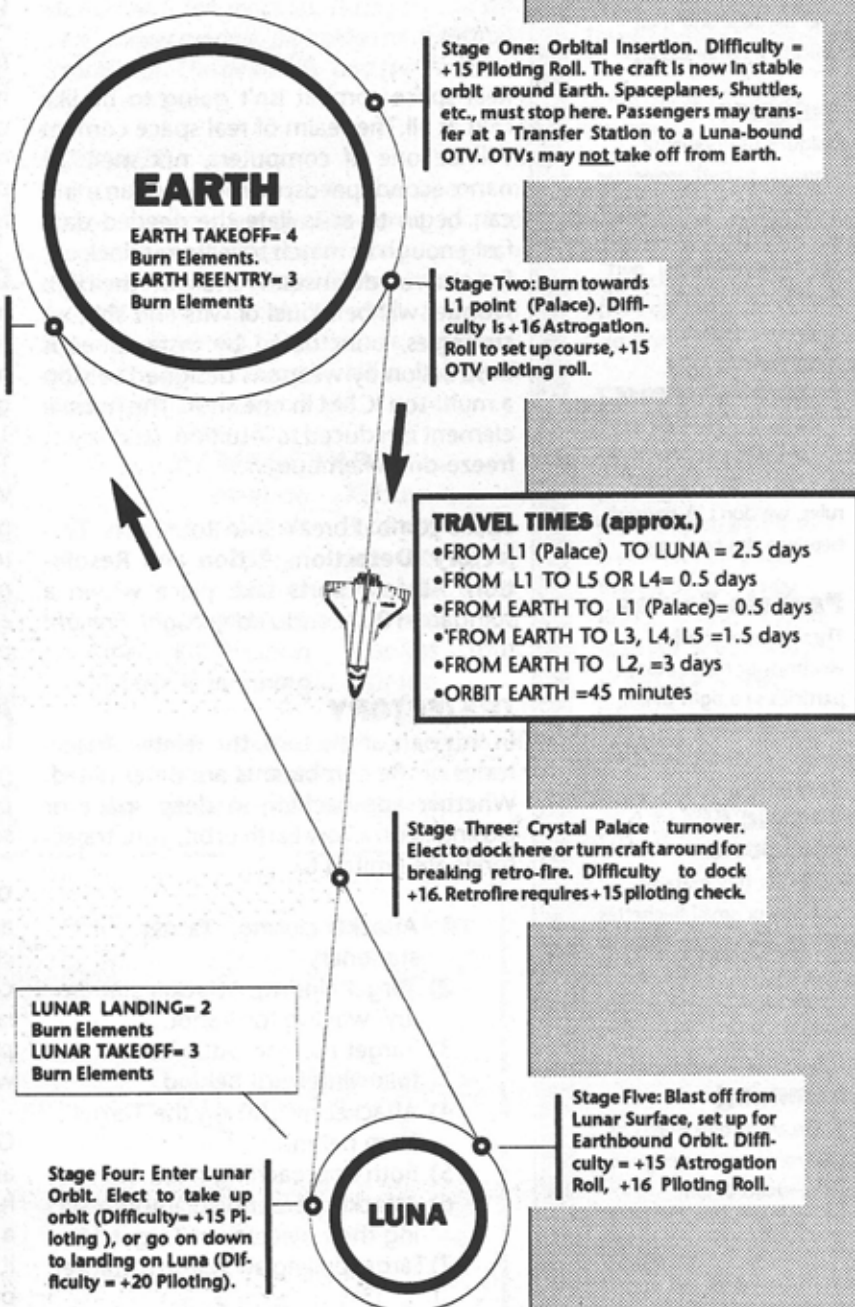
A standard course from Earth orbit to lunar orbit would use up three burn elements; one to leave orbit, one to turn around at the halfway point (notice how the Crystal Palace just happens to be in the L1 halfway point?), and one to get into stable Lunar orbit.

Taking off from Earth uses up four burn elements, while reentry uses up three. This is one reason why spaceplanes, shuttles and deltas are unable to do much more than take off, make a few orbits, and land. Landing on the Moon would use an additional two elements, while take-off would use three.

*Warning. These are not actual orbital mechanics; they are simple simulations of the real thing. This is a roleplaying game, not an astrophysics course.

FUEL TABLE

Spacecraft	Total Burns
Spaceplane	8
Shuttle	10
OTV	10
Delta	7
Satellite (any type)	3
Workshack	2



SPACE WEAPONS

Chemical Lasers

Chemical lasers are high intensity beams capable of shearing through steel or aluminum. They cause heat damage and melt delicate internal circuits.

Railguns

Railguns use powerful magnets to hurl projectiles at hypersonic speeds. The projectile can be metal or plastic with a metal "skirt" to grip the magnetic fields.

Missiles

These are heat seeking or radar guided missiles, much like those used in air combat today. In these rules, we don't distinguish between the two types.

Particle Beams

These propel charge electrons or other atomic particles in a tight beam, tearing through thin metals and electronics.

Kinetic Kill Weapons

These fire tiny metallic particles or small flechettes of dense materials, which "shotgun" through the target at incredible speed.

Electronic Jamming

These are strong bursts of electronic noise, designed to overload or jam spacecraft controls and telemetry.

REALITY & SPACE COMBAT

"Lt. Buck Yeager brought the delta screaming around in a tight dive, releasing both of

his wingtip missiles at the incoming Kosmos battlesat. The Soviet warmachine spun back and out of range, firing its own deadly barrage of tracers..."

Forget it.

Real space combat isn't going to be like that at all. The realm of real space combat will be one of computers, not men. At nanosecond speeds, no mere human mind can begin to assimilate the needed data fast enough to match trajectories, lock on, fire and run defenses. Warfare on the High Frontier will be a duel of wits and shifting strategies, punctuated by instantaneous destruction by weapons designed to stop a multi-ton ICBM in one shot. The human element is reduced to intuition, strategy or freeze-dried hamburger.

Space combat breaks into four parts: **Trajectory, Detection, Action and Resolution.** All four parts take place within a standard 10 second *Friday Night Firefight* turn.

TRAJECTORY

In this part of the turn, the relative trajectories of the combatants are determined. Whether approaching in deep space or closing in on a Low Earth orbit, your trajectories are limited to:

- 1) Attacker closing, Target stationary.
- 2) Target closing, Attacker stationary, waiting for a shot.
- 3) Target moving, Attacker following from behind.
- 4) Attacker overtaking the Target from behind.
- 5) Both approaching head on.
- 6) Attacker perpendicularly intersecting the trajectory of Target.
- 7) Target pulling away from Attacker.

Determine how far apart the combatants

are at the initial point of intercept. In general, a satellite in Low Earth Orbit (LEO) will be orbiting at @2,000 (3,200km) miles above the Earth. The maximum range of any of the standard space weapons is 1,000m(1,500km). This means an intercepting delta will have to cover much of this distance before it can launch an attack. Objects in Geosynchronous Orbit are @22,000 (3,500km) miles out, requiring an even longer trip to knock out most stable workplatforms and satellites.

It is assumed in these rules that spacecraft move at 100 miles (150km) per FNFF combat phase (3.2 seconds). This would mean that a delta would take about 10 phases (320 seconds/5.3 minutes) to climb from Earth to LEO, get a lock on and shoot.

DETECTION

In this part of the turn, both sides attempt to detect and lock weapons onto each other. To detect a target, you must roll greater than 3 on 1D10 for targets within 100 miles (150km). For every additional 100 miles, add +1 to the base difficulty. Without lock on, you cannot attack a target. *Example: a Kosmos IIX battlesatellite is under attack by a USAF delta, coming out of orbit 400 miles (450km) away. To detect each other, each craft must roll a 7 or higher on 1D10.*

ACTION

In this part of the turn, combatants program their computers for the most appropriate response. Only one option can be selected per turn.

Defend: This can be any possible defense against an attack, including ECM, flares, chaff or countermissiles to knock down or confuse incoming missiles, aerosols against lasers, magnetic fields against charged particle beams, or evading kinetic kill weapons.

One form of defense is to choose a "burn" action. To burn means that you will expend fuel to evade your attacker. However, while a burn is effective against all types of attack, it has one limit—fuel. Each time uses up one burns worth of fuel.

BURN TABLE

Spacecraft	Total Burns
Spaceplane	8
Shuttle	10
OTV	10
Delta	7
Satellite (any type)	3
Workshack	2

Attack: Most smaller vehicles have only one or two weapons on board. These include lasers, particle weapons, missiles, kinetic kill weapons, and electronic jamming weapons.

WEAPON HIT CHANCE

Weapon	Hits on a
Chemical Laser	70% or less
Railgun (10 shots)	50% or less
Missile	50% or less
Particle Beam	
(stations only)	60% or less
Kinetic Kill Weapon	60% or less
Electronic Jamming	60% or less

To avoid confusion, both sides should write down their selected action and reveal them at the same moment.

RESOLUTION

Compare the selected attacks against the selected defenses on the **Resolution Table**. If the result is an **N**, the attack is unaffected by the programmed defense and attacks at full strength. If the result is a **Y**, the attack's strength is halved (round down). *Example: Kosmos' chemical laser hits on a roll of 70% or less. However, the USAF delta*

has deployed an aerosol fog, which is effective against lasers. The Kosmos laser will hit on a 35% or less instead of a 70%.

Targeting workshacks or stations: These are far larger than the small areas of a shuttle or delta. When targeting a workshack or station, you must declare what module of the station is targeted. On a hit, that module takes damage. *Example: a Soviet delta takes aim on a USAF battle station with ten modules. It targets the station's power module, planning to knock it out in one shot. The delta hits, and the module is totally destroyed.*

DAMAGE

Here's the bad news. Most weapons in space combat are overpowered for the targets they will encounter (for example, a railgun firing a standard 7 gram Lexan bullet will punch a hole through a 4 inch aluminum block). This means a hit will either **cripple** the target or **kill** it. Roll 1D10 and check the table below:

DAMAGE TABLE

Weapon	Kills on a
Chemical Laser	3 or less
Railgun	8 or less
Missile	9 or less
Particle Beam	5 or less
Kinetic Kill Weapon	6 or less
Electronic Jamming	3 or less

A **killed** vehicle is reduced to a mass of scrap. The crew is dead, the cargo ruined, and the vehicle itself unsalvageable.

RESOLUTION TABLE

	Aerosol	C.Missiles	ECM	Flare/Chaff	Evade/Burn
Chemical Laser	Y	N	N	Y	Y
Railgun	N	N	N	N	Y
Missiles	N	Y	N	Y	Y
Particle Beam	N	N	N	N	Y
Kinetic Kill Weapon	N	N	N	N	Y
Electronic Warfare	N	N	Y	N	Y

SPACE DEFENSES**Aerosols**

These are chemical fogs that dim and retard laser energy.

Countermissiles

These are tiny missiles used to knock down incoming missiles. They are fired in huge numbers, to enhance the chance that they will intercept the attacking missile.

ECM

These are hardened electronic circuits and counter jamming frequencies that can stop electronic warfare attacks.

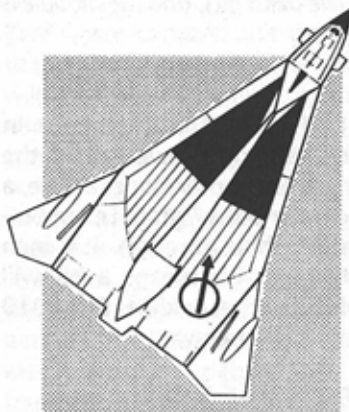
Flares & Chaff

Flares are heat-emitters that confuse heat seeking missiles. Chaff is a cloud of tiny metal strands that create confusing radar images to deter radar guided missiles. They are launched at the same time as part of a bundled package.

A crippled vehicle can no longer fight. Crews of crippled spacecraft have roughly a 20% chance (roll for each crewmember) chance of surviving a crippling hit (sure, you can survive a few wounds, but can you survive several dozen punctures to your suit?). However, for *roleplaying* purposes, it's usually better to let the Referee of the individual campaign decide the outcome, crew wise. After all, there's a lot of roleplaying action to be milked out of a damaged

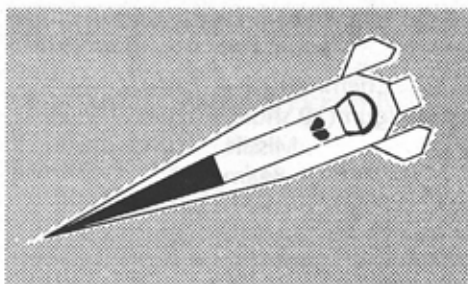
shuttle limping back to a workshop out in the wilds of deep space.

Crippled spacecraft, such as OTVs, deltas, shuttles and spaceplanes have a 30% chance of being able to still move (at quarter speed). They may not attempt reentry. Hopefully, there will be enough burn elements remaining to move the ship to a nearby station or workshop.



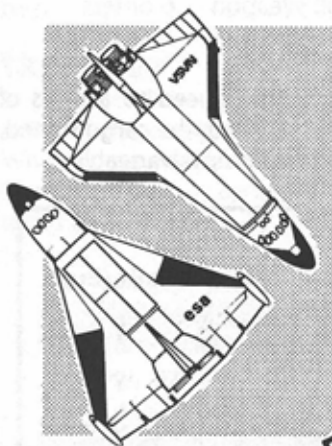
SPACEPLANE

ECM
Flares & Chaff
Chemical Laser



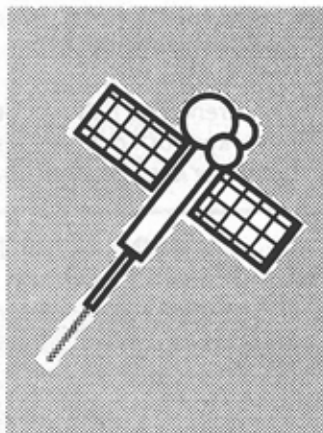
DELTA

One Kinetic Kill Weapon
Flares & Chaff
Chemical Laser
ECM
Missiles (4)
Counter missiles (4)



SHUTTLE

Flares & Chaff
Chemical Laser
ECM
Electronic Warfare

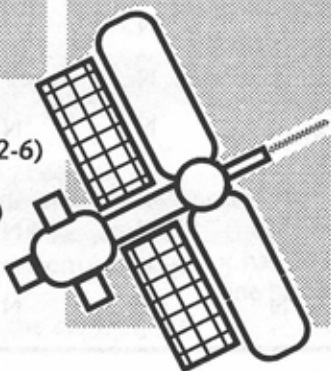


BATTLE SATELLITE

Choose one:
Chemical Laser
Railgun
Kinetic Kill Weapons (2)
Electronic Warfare

BATTLESTATION

Kinetic Kill Weapon (2-6)
Flares & Chaff
Chemical Lasers (2-4)
Railgun (1)
Aerosols
Countermissiles(10)



ORBITAL COLONIES

Since the earliest days of space exploration, the goal has been to establish a permanent foothold on the High Frontier. In 2013, this goal has been met in a wide variety of ways, including workshacks, battlestations, space habitats and lunar colonies.

WORKSHACKS

These are small, non-gravity stations, designed to support corporate research, manufacturing or repair. The average workshack is made up of five to ten modular sections, including two or three living sections, a lab section, a lifesupport module and a power module. These modules are fairly standardized; about 85% of all workshack sections in orbit are constructed by Japanese-based corporations, working from a base plan developed in 2006 by the Mitsubishi/Koryidanshu Corporation. Specialized modules are constructed by the individual corporations themselves and mated to the basic modular design. There are close to a hundred individual workshacks in Earth orbit.

Workshacks do not have gravity; they are far too fragile to apply spin to. Instead, most have a gravity wheel attached to the central hub to provide relief from the stresses of zero gee. Workshack personnel are usually rotated back to gravity after a four month tour of duty. Most workshacks support crews of ten to twenty people.

Protection from Radiation: Most Workshacks have a small, heavily shielded module designed to stand a moderate solar flare. These cramped modules can support twenty people for up to four days. But it won't be a *fun* four days...

AUTOFACORIES

These are small structures, usually consisting of a power module, a monitoring station, and the main factory module. Autofactories are designed to produce zero-gravity products, such as long-chain polymers and low-gee crystals. OTVs carry raw materials to an autofactory once or twice a

month, pick up whatever has been produced, and restabilize its orbit before leaving.

Autofactories have almost no accommodations for personnel. They are primarily factories with only limited habitation at best.

BATTLESTATIONS

These are relatively rare. Although an enormous amount of "Star Wars" talk was generated by the US and USSR in the late '90's, budgetary considerations and the influence of the ESA kept the actual number of battlestations down to around five confirmed installations. Three of these are controlled by USAF Space Command, while the remaining (and larger) two are the property of the Soviet Rocket Corps.

Battlestations are very similar to workshacks, however they are usually built around a central or "core" weapon. This is usually a powerful laser or kinetic kill weapon. Adjacent modules may contain missiles, nuclear weapons, smaller kinetic kill weapons or particle beam arrays. While battlestations are usually well hidden behind ECM screens, their huge sensor arrays and high-powered radiation signatures make them very distinctive on a close visual approach.

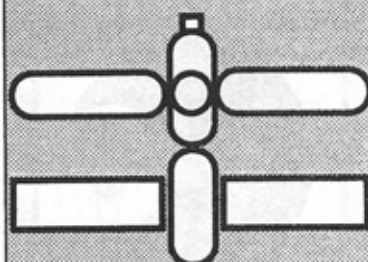
If, of course, you *live* long enough to get that close.

SPACE HABITATS

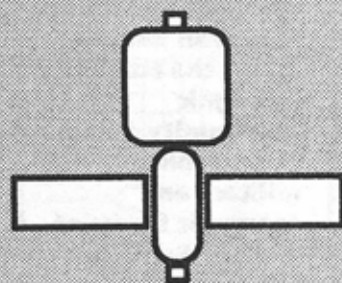
These are the most recent additions to the orbital hardware display. Habitats are designed to be stationed in deep space between the Earth and Moon. Isolated from regular supply runs, they must be self-supporting mini-worlds, capable of generating their own air, water and food.

In order to achieve this level of self sufficiency, habitats must be very large to start with. They must also be capable of generating their own spin gravity, which requires that they be either torroidal or cylindrical in shape.

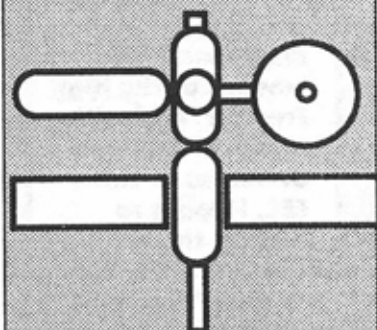
The largest space habitats have been nicknamed "L-5's", after their orbital positions at the Lagrange Points around Earth and the Moon. The most famous of these is the



WORKSHACK



AUTOFACORY



BATTLESTATION



EUROPEAN SPACE AGENCY

Right now the single most powerful force in space, the ESA is an outgrowth of an economic consortium of European nations called the European Economic Community. With the combined military and economic forces of France, Britain, Greece, Spain, Belgium, the Netherlands, Ireland, Italy, Luxembourg, The United German Republic, Portugal, Denmark and Austria, the "Common Market" nations control a disproportionate amount of the High Frontier. And with the USSR's recent overtures to the EEC, it looks as though the so-called "Pacific Century" may well become the "Age of New Europe".

ESA's Crystal Palace transfer station at L-1.

Constructed in the eleven year period between 2000 and 2011, the Palace is a five toroidal ring structure built around a large core extending for one mile through the center of the station. Each toroidal ring has a radius of 1.5 miles (2.2km). The three central "rings" are entirely enclosed, while the outer two rings have two-meter thick leaded glass windows to permit light to enter.

The torroids are protected from hard radiation by a thick shield of lunar rock. As with most space-borne equipment, all hardware on the Palace is shielded against EMP. The torroids spin at sufficient rotation to provide 0.8 gee at the rim, dropping about 0.1 gee for every 300 approximate feet of altitude towards the hub.

Inside each inner torus are four levels of living facilities, manufacturing plants, life support systems and apartment blocks. The two outer torroids support huge open parks; not only for recreation, but to provide the bulk of the Palace's oxygen supply. While most of this area is devoted to open space, there are common buildings, restaurants, and housing for high ranking Corporate and ESA officials.

While the ESA technically owns the Palace, it is in fact used by all spacecapable nations, each of which maintains an embassy on the Palace for it's nationals. Living space is leased by the ESA to the highest bidders on a twenty year renewable basis. In turn, the ESA maintains emergency services, general security and station upkeep. Police services and law enforcement are the exclusive province of INTERPOL; the intra-European police organization, under an agreement with the ESA, reserves the right of judicial power over criminal offenses.

O'NEILL ONE

The next step in the colonization of space is the half-completed O'Neill One colony. Built along the cylindrical plan, the colony, named after space colonization pioneer Dr. Gerard K. O'Neill, is a titanic twenty miles (30km) long and five miles (8km) wide at the cross section. The entire inner

surface is covered in earth, broken by running waterways and huge windows to allow sunlight to enter.

The ESA's O'Neill One is planned as the first of five major habitats, one at each of the stable LaGrange Points around Earth and the Moon (see Map, pg.9). These "L-5" colonies will be the basepoints for future interplanetary exploration.

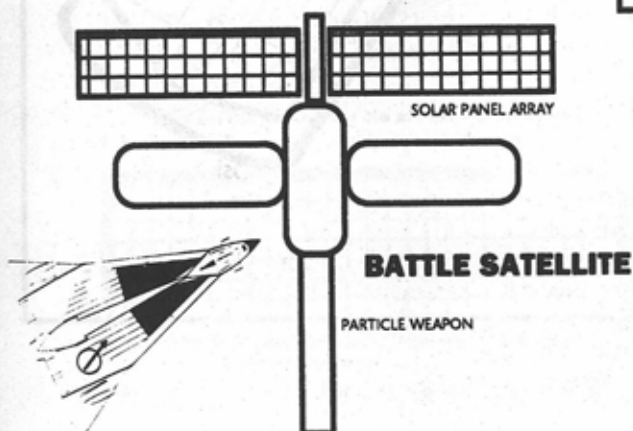
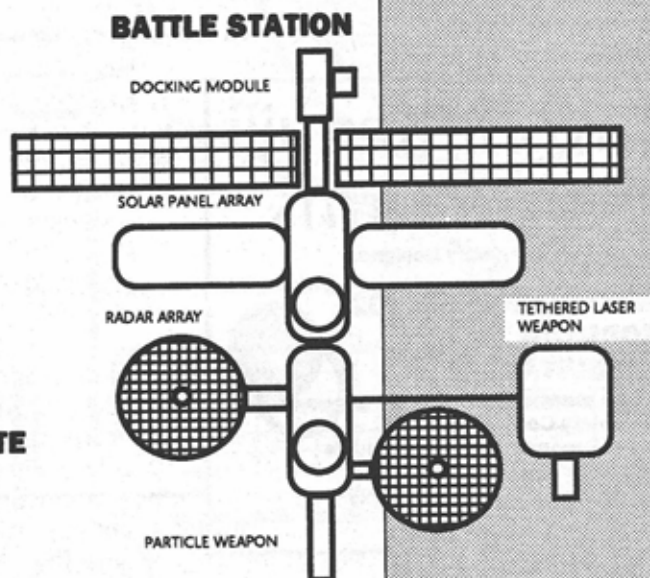
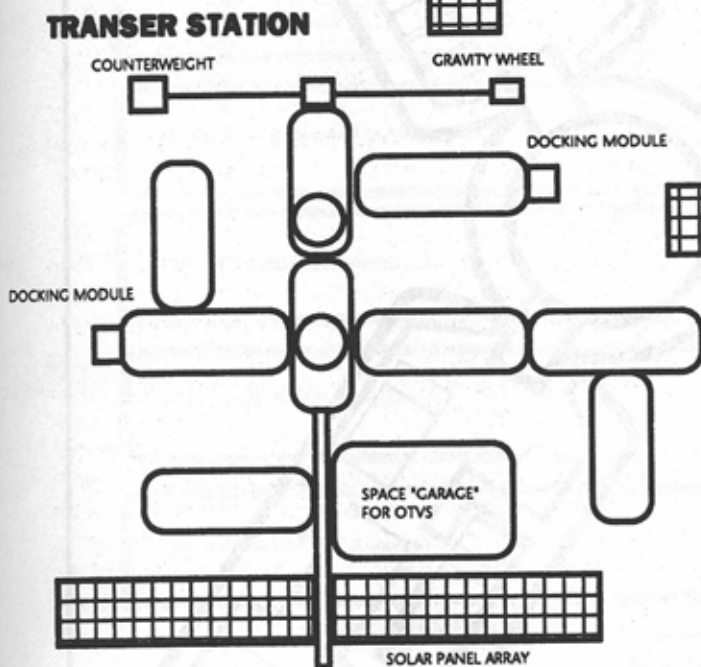
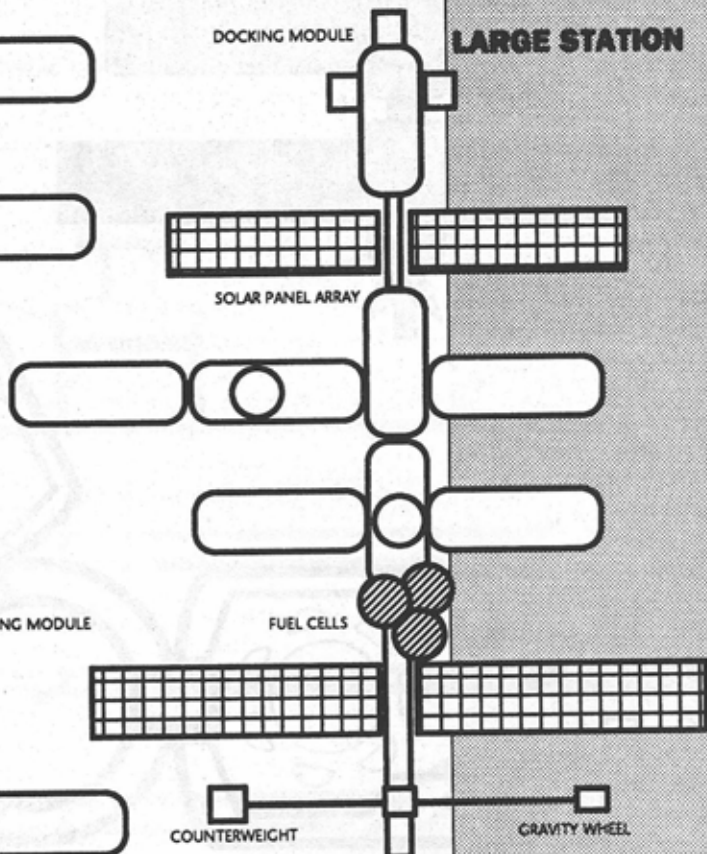
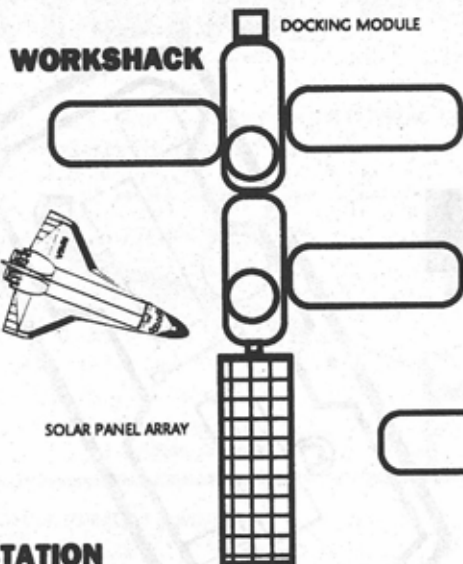
TYCHO & COPERNICUS

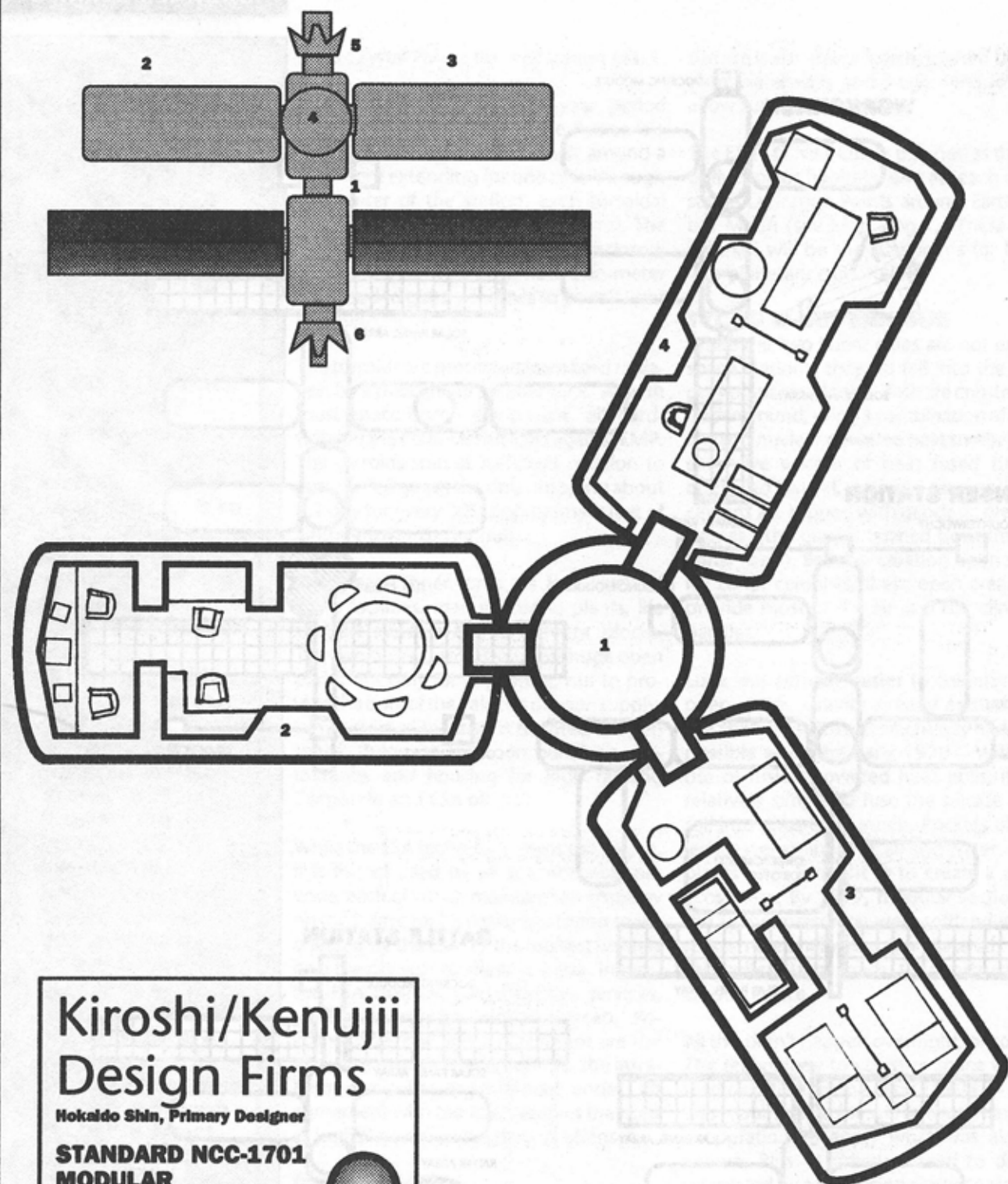
While the two Lunar cities are not exactly space stations, they do fall into the category of space colonies. Both are constructed underground, using a combination of blasting and nuclear powered heat smelters. An extensive warren of heat fused tunnels open into central, park-like caverns. These caverns are topped with geodesic pressure domes (the glass is formed from smelted Lunar sand). Besides creating open space for Lunar colonists, these open areas also provide most of the air and recycling capacities.

Luna was actually easier to colonize than open space. Gravity already existed, and the ability to soft-land machinery had been possible since the early 1970's. With the use of fission powered heat drills, it was relatively simple to fuse the silicate lunar soil into glass-like tunnels. Pockets of buried ice were mined for air and water, while plants were brought in to create a viable ecosystem. By 1999, modular sections of the Tycho massdriver were softlanded and reassembled, allowing raw materials to be catapulted into space to construct the Crystal Palace.

All this didn't happen overnight, of course. The technology to colonize space was already in place by the early 1990's — what was required was the will and international cooperation to apply what was already known. Plus a driving need to do so, generated by a collapsing ecosystem and a degenerating society.

You'd be amazed what rats can do to escape a sinking ship.





Kiroshi/Kenujii Design Firms

Hokaido Shin, Primary Designer

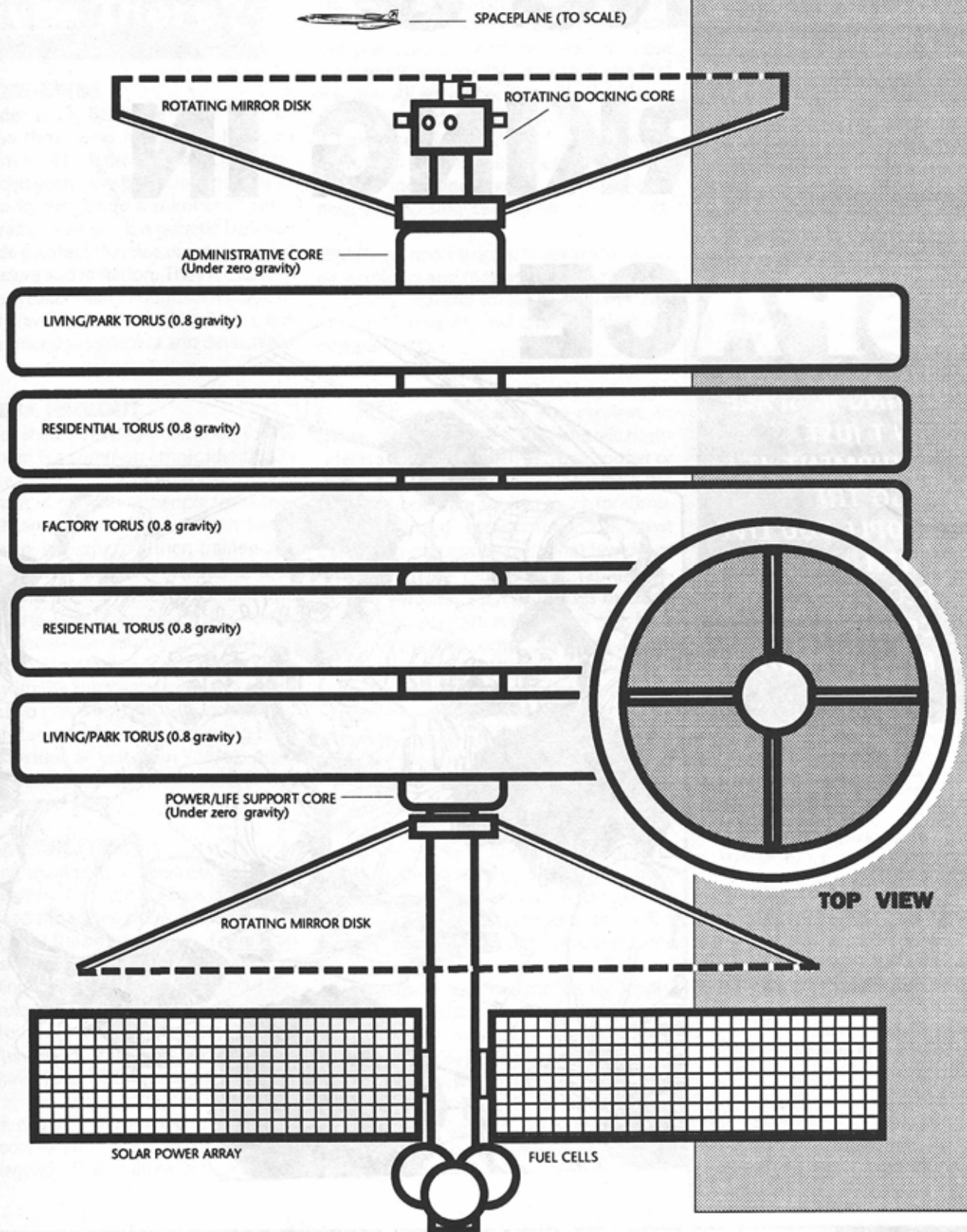
STANDARD NCC-1701 MODULAR WORKSTATION

Design parameters:

- (1) Primary Core Module
- (2 & 3) Secondary Habitat Modules
- (4) Primary Lab Module (4)
- (5 & 6) Docking Collar Assembly



CRYSTAL PALACE



LIVING & WORKING IN SPACE

LIVING IN SPACE
ISN'T JUST
EQUIPMENT. IT'S
ALSO THE
PEOPLE YOU LIVE
WITH — THE
PEOPLE YOU
COUNT ON TO
BACK YOU UP.



But Who Lives There?

HIGHRIDER(S)

Highrider is an Earthside term used to describe those who have been born, or spend most of their time working, in Space. Highriders who have been born outside of the gravity well share a number of common traits. Most share a genetic heritage towards greater tolerance of zero gee, low air pressure and radiation. They are usually slightly weaker than Groundsiders, due to lack of gravity (-1 mod to Body Type), but have tremendous stamina and determination.

THE ESA HIREOUT

Another shared heritage common to the spaceborn is a common ethnic identity. In the late 1990's, the ESA arranged the recruitment of millions of people from central African nations. Entire African townships were brought together, trained and put to work on ground installations, such as the Kilimanjaro massdriver and the high energy laser lift array at Dakar. As the ESA expanded operations into space, these African construction workers moved into space with the European techs. As a result, nearly two thirds of the spacer population is of African descent. The remaining third are a mixture of European (35%), Asian (25%), Middle Eastern (6%), Soviet (14%) and American (20%).

TRIBAL CULTURE

A strong tribal culture pervades the Highrider work crews. Institutions similar to manhood rituals and rites of passage exist throughout the Orbital Zone. There is an extensive oral history—Highriders are fond of telling stories and legends, and have constructed entirely new mythologies based on life in space (or "The Big Dark", as it is often called). These cultural identifications have, to some extent, been absorbed even in the technician and managerial classes, expanding from their original African roots to encompass Asian and European legends. Their culture thus combines

the best of African, Asian and European styles, with bold colors and a vibrant, exotic urgency.

The space environment being as dangerous as it is, Highriders are uniformly intelligent, fast reacting, and level headed. Those who aren't are usually dead after the first mistake. All are well educated—in isolated workshacks and construction projects, there is little else to do but read or talk. Most Highriders can speak several other languages, including French, German, Japanese and possibly several African dialects.

Highriders don't smoke. Smoking fouls the air scrubbers and messes up the electronics (in space, cigarette smoke has a nasty habit of carbonizing around charged electrical components).

Highriders rarely drink. Drinking impairs the faculties and makes you careless. In space, carelessness kills. An alcoholic Highrider is a dead Highrider, because sooner or later, he'll make a critical error that will ace him. Highriders are also not much for stimulants or drugs, except under the most controlled circumstances. What few drugs exist are usually rapid-acting, rapidly dispersing aerosols, such as nitrous oxide or related compounds. A Highrider gets high in an instant, and comes down just as fast. The most common Highrider addiction is the braindance—the neural hookup which allows the user to "live" in an artificially generated reality (much like a NET-based interface program).

In the crowded environment of a space habitat, personal space and privacy are at a premium. Like other crowded cultures (such as the Japanese), Highriders have evolved many social conventions to create a sense of privacy. There are no nudity taboos, but it is considered rude to stare while someone is undressed. Personal belongings are few, and the "kit" or "outfit" is the most private of a Highrider's things. However, most will lend a stranger something if he needs it. Highriders are slow to anger, but are extremely tough to beat when riled up. Because of their taboos against using guns in pressure, they are experts at using martial arts or knives in combat.

HIGHRIDER SLANG

Apogee: The best. The greatest.

Big Dark: Space

Breathe Vac: To run out of air.

Cobbers: Your buddies or members of your workgang.

Chao! To be tough. A real stud.

Config: To arrange something. As in "I configged to dock with her."

Delta'd: To make maximum speed towards some place, as in "I delta'd to Luna."

Drop Out: Go back to Earth or Luna.

Dock: To meet someone. Also, to have sex.

Go LEO: Go from Earth to Near Space.

Groundsider: Someone who's never been in space.

Grab Gee: To spend time in a gravity field.

Grav or Gee: Weight. Also; a measure of importance, as in, "I didn't have the gee to pull it off."

Popsicle: A frozen corpse, usually found in a drifting spacewreck.

Rad: Radiation. Also a dose of radiation.

Reconfig: To kill with a knife.

Solar Wind: Hot air; something that is pretty much bull.

Walkabout: To go outside of a pressure dome or ship. To go EVA.

Zeroed: To die. To be killed.



A TYPICAL HIGHRIDER

ROLE: WORKGANGER
INT 6, REF 7 (9 w/boost),
COOL 7, TECH 7, LUCK 4,
ATTR 7, MA 6, BOD 6 (-1
for low gee), EMP 6.

CYBERWEAR: Reflex Boost.
Twin cyberoptics with anti-
dazzle, IR, telescopes.
Cyber audio w/ radio
splice.

SKILLS: Zero Gee Maneuver
+7, Zero Gee Combat +4,
Space Survival +7, Shuttle
Pilot +2, Astrogation +2,
Melee Weapons +7,
Brawling +4.

OUTFIT: Knife, Skinsuit,
EVA Backpack,
Powerdriver, Techscanner,
Rad Meter, Drink Bottle,
LapPad™, Radmeter, Grip
Slippers, Headset commo.

HOW DO THEY MAKE A LIVING?

A wide variety of possible careers exist in orbit. Many of these are variations of existing *Cyberpunk* character classes (Solos, Rockers, etc.) with their own Highrider style twists. For example, a Highrider Rockerboy would be more prone to use his vocal or storytelling skills than massed ranks of heavy-metal amps. Many other classes fall into the general area of support—a Fixer might be in charge of the supplies and purchasing of a workshack, while Medias might control the communications and public information channels of a large colony. The *Space Careers Table* gives the relative percentages of each type (a fast encounter table for Referees), as well the basic class types each standard *Cyberpunk* character will fall into.

SPACE CAREERS TABLE

01-35	Workganger
36-45	Support (Fixer, Media)
46-70	Technician/Biotech/Medtech
71-75	Corporate
76-80	Security (Solo)
81-84	Shuttle Pilot (Nomad)
85-90	OTV Pilot (Nomad)
91-93	Military Pilot (Nomad)
94-96	Entertainer (Rockerboy)
97-00	High Ranking Corporate

...WHAT DO THEY WEAR?

Despite the wide variety of nationalities, races and cultures in orbit, the environment has caused clothing to become pretty standardized. The most common outfit is a loose coverall with lots of pockets, usually adorned with patches signifying the wearer's corporation, workgang or group, and any other workshack or station patches accumulated over the years (dozens). Shortsleeved coveralls exist as well. The one thing you will never encounter is a dress or skirt—in zero gee, dresses end up around the wearer's face!

Many of the workganger groups go nude or close to it in their home stations. Hair is worn short or pulled back.

Personal adornment: Highriders aren't big on makeup, complex hairstyles or accessories. Whatever jewelry exists is close fitting and simple, to avoid dangerous entanglements in zero gee. Many workgangers affect ritual tribal scars, or tattoos. Perfume is never worn—in the close confines of a workshack or OTV, even the best perfume can get pretty oppressive.

...WHAT DO THEY EAT?

While the preprocessed food paste tubes of the early space program are still available, a great deal of time and energy has gone into the preparation of "real" food in orbit. Hydroponic tanks not only support growing plants, but shrimp and small fish as well. The Highrider diet runs to vegetables, tank-grown seafood, algae and dried starches like rice and noodles, all covered in thick (to hold it on the plate), usually highly-spiced, sauces.

Food is processed in special prep labs in the spin gravity sections of the larger stations. It is packaged in microwaveable bags, with all extra water removed and recycled, or in recycleable dishes covered in plastic wrap (also microwaveable). Crumbly foods are avoided—you won't find much bread in space.

Drinks are packaged in airtight bags with drinking straws as part of the container—hot drinks like coffee have small creamer and sugar packs as part of the container; one squeezes in as many cream/sugar sections as desired, then microwaves the entire package. The one drinks you won't find in orbit (except on the Palace) are carbonated sodas or beer; these are too likely to end up as impromptu missiles in a workstation's zero gee.

CYBERWARE IN SPACE

The heavy metal armored cyberganger of Groundside is a rare occurrence in space. There are a couple of really good reasons for this. For starters, in space, the cascading radiation and electromagnetic effects of LEO tend to make normal cyberware malfunction (10% of the time). This means that orbital cyberwear must be hardened against stray electromagnetic disruptions, increasing the cost by 50-60%.

Most heavy cyberware is also weapons intensive, using guns and other kinetic weapons. In a low gee, pressure-sealed environment, these weapons must often be replaced with less lethal knives or rippers. Flechette weapons can be installed on a 24 hour turnaround by most competent Orbital techs, at a cost of about 150-200 Euro per installation (not including weapon costs. But that's 24 hours when you don't have a left arm, right?

On the other hand, certain cyberware modifications are very common in space. As many as 40% of all Highriders have replaced both eyes with cyberoptics, allowing them to dispense with heavy eyeshields and glazed helmets. Radio splices are also common (70%), as are various forms of reflex and sensory boosts.

In space, subtle is best.

ORBITAL CAREERS

In addition to variations on the standard *Cyberpunk* careers, the High Frontier adds two new careers that are space specific. Characters electing to take these careers will be generated as normal. Those characters who have been born in space (these characters must be age 17 or lower), may at this time take advantages in avoiding spacesickness (pg. 12), and in Zero Gee Manuever Skill (pg.13).

Shuttle, Spaceplane and OTV Pilots

These are all specialized pilots of types of spacecraft. The skills for flying space vehicles are very different than those of a standard aircraft. There's no air to work against for one thing; all maneuvers are made with retros and changes in thrust (also known as *Delta-Vee*). **Special Ability: Brotherhood** (a variant of Family). The fraternity of spacepilots is a tightly knit fraternity of tough, exceptionally skilled people. Spacepilots can always call upon another pilot buddy to help them out, much as nomads can call upon members and resources of the Brotherhood.

Workgangers

The construction workers of space, workgangers are experienced in using spacesuits, EVA packs, and workmodules. Tough and self reliant, workgangers are experienced in zero-gee combat. **Special Ability: Workgang** (Family variant). Much like pilots and nomads, workgangers can call upon the aid of their particular workgang. When you consider the fact that this could be as many as two hundred-plus people, this skill carries a lot of weight.

ORBITAL SKILLS

These are skills learned and used in orbit. With the exception of astrogation,

you must actually get hands-on experience in space in order to learn these skills. These skills (excepting Astrogation), can be learned via chips, but cannot be adapted to without zero gee experience. If space-sick, you will be unable to learn a chipped skill until cured.

EVA

This is the skill required to know how to use EVA packs, hand-held thruster units, etc. In use, the Referee will determine the difficulty of the maneuver, and have the player roll against this rating. This is a REF based skill.

ZERO GEE MANEUVER

The skill of moving in zero gee without EVA packs, etc. By shifting the body, pushing off walls, etc., the player can move about a zero gee environment with relative ease. As with EVA, the Referee must determine the difficulty of the maneuver attempted; as a rule of thumb, pushing off in a straight line and stopping at the end without hitting the wall would be an AVERAGE (+15) task. REF-based.

ZERO GEE COMBAT

Zero Gee Combat is a fighting style developed specifically for zero gravity. This skill replaces Martial Arts and/or Brawling when fighting in a gravity-less situation (if you were to use these other combat skills, you would end up a spinning tangle of arms and legs). As part of the training, *rei-ju-ryoku-ryu* also teaches the character how to use recoil weapons in zero gravity, adding a modifier for Recoil Saves (see pg. 13). You must have at least five points in Zero Gee Maneuver before you may acquire this skill. It may also never be higher than your Zero Gee Maneuver Skill.

SPACE SURVIVAL

This is an INT based skill allowing the player to know proper procedures during space emergencies, how to use a goop patch, how to use an airlock, how to read a personal radiation meter, what to do in a solar flare, etc. Referees may use this as a general knowledge skill for any important information a character may need to know about day-to-day survival in space.

SPACEPLANE/SHUTTLE PILOT

The skill of piloting spaceplanes and shuttles, knowledge of scramjet engines, how to dock with stations (DIFFICULT), and how to make a proper orbital reentry (VERY DIFFICULT) without burning up in the atmosphere.

OTV PILOT

The skill of piloting OTVs and other small cargo type spacecraft. This skill allows characters to make soft lunar landings (VERY DIFFICULT), dock with space modules (DIFFICULT), and maneuver an OTV

through space. REF based. Extra IP cost=+1.

ASTROGATION

This skill allows a character to calculate a spacecraft course, using computers, course tables and navigation beacons (DIFFICULT). Without these navigational aids, the difficulty of this task increases to VERY DIFFICULT. INT based. Extra IP cost=+2.

THE ORBITAL CHARACTER & LIFEPATH

Orbital characters of all types may use Lifepath as normal. Add the following skills to the assigned sections of the Education Path.

HIGHER EDUCATION

Space Survival
Astrogation

MILITARY EDUCATION

Zero Gee Maneuver
EVA
Spaceplane/Shuttle Pilot
Zero Gee Combat
Space Survival
Astrogation
OTV Pilot

PICKUP SKILLS

Zero Gee Maneuver
EVA
Spaceplane/Shuttle Pilot
Zero Gee Combat
Space Survival
Astrogation
OTV Pilot



Cyberpunk

Near Orbit

HANDLE

VISUAL READOUT

ROLE

SEX

AGE

RAD LVL

STATS ROLL 6D10 +30 or 9D10. Max is 10 per stat, Min is 2 per stat.

INT

TECH

REF

Aggressiveness

HIGH, MEDIUM or LOW?

COOL

LUCK

ATT

EMP

MA

BODY

BODY TYPE

Run

RUN=4 x MA

Leap

LEAP=Run/10

Throw

THROW=BODY x 3

Competence

HIGH, MEDIUM or LOW?

Carry

CARRY=BODY x 5KG

Lift

LIFT=CARRY x 4

CYBERWARE

HC

SKILLS

LVL IP

1
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Description, Glitches, etc.

OUTFIT

CHILD'S PLAY

SABOTAGE,
BETRAYAL AND
INTRIGUE AWAIT
A CYBERPUNK
TEAM ON THE
HIGH FRONTIER



GOIN' UP

Riding a space-plane into orbit is a lot less exciting than the holos would have you believe.

Sort of like being on a big, comfortable, well-appointed bus which just doesn't stop. The only real shock comes when, after an hour of acceleration, you suddenly notice a tickle in your stomach and inner ear (make a Average roll vs. BODY or lose the munchkin portioned dinner you just got).

Welcome to Zero Gravity.

The stewards now walk around in velcro slippers and are *real* careful about making sudden moves. So are you. The only good thing is the view, and *that* is spectacular. The Earth curves away like a sheet of cloudy sapphire against the deepest black. Just about the time your inner ear is about to give up and crawl down your spine, the all-too-pleasant female voice comes on and tells you to prepare for dock with Johnson Space Platform. On the platform, you are subjected to the same sort of customs procedures as in the airport except you are now floating and nauseous. This a clearing area, and having been warned *not to bring any weapons*, you *should* make it through this part without a hitch. You didn't bring any weapons now, did you? Nod yes..

They pack you into a OTV (Orbital Transfer Vehicle) for travel to Crystal Palace: sort of a small, not-so-well appointed bus with no windows. You can hardly wait to dock. Really.

As your group floats off the shuttle and into a long tubeway, you are treated to the moist scent of chlorophyll, slightly tainted by the tinny odor of recycled air. You traverse this tubeway by using handholds to pull yourself along (make an EASY roll vs. ATHLETICS skill: if this is missed, you will flounder in the tube for a moment until a steward can help you obtain a handhold). The Crystal Palace awaits.

When the party reaches the end of the tube, they enter a cylindrical room which

matches spin with the the receiving torus. This door opens onto a rampway which at the bottom leads directly into a large room.

PLAYING THE PALACE

This is the Crystal Palace receiving area, and, once again, having been warned **NOT** to bring **ANY WEAPONS**, the party **SHOULD** make it through this part without a hitch. Nuff said? Sonar scanners, body searches and all sorts of entertainment await the would-be smuggler, and orbital folks do not mess around. Any weapon more dangerous than a letter opener, whether cybernetic or otherwise, will be confiscated and the offender jailed. Weapons like rippers or wrist blades will be disabled by techs (although its not too hard to get them operating again later...). Software and armor are allowed. Casual violence in this environment cannot be permitted.

While in receiving, the party is approached by a huge man whose skin is as black as the night sky outside. He says his name is Basimba and that he will be one of the instructors that the group will start working with the next day.

MISTER BASIMBA TO YOU

Basimba is a tribal workganger and has had about as much experience EVA as anyone alive. He'll tell the group about himself, along with the warning that if anyone wants to "touch mud" again they better do exactly as he says. He begins...

"Okay, starting right now and until I leave you we're going to play a little game". At this point he throws a little bean bag to someone in the party. (You might want to get your own representation of this bag and toss it to one of your players.)

Basimba continues. "Now you have two seconds to throw that to someone else." He then takes a little device out of his pocket.

If the person Basimba threw the bag to has thrown it to someone else, he says, "Now you have two seconds to throw it to another person, but not the one who threw it to you."

MISSION PROFILE

Contract for 5-7 independent operatives, must include at least one net specialist, 3 solos, and preferably a tech.

THE MISSION:

Standard operative contract to conduct technical and tactical penetration.

TARGET: Orbital target/workshack with specifics to be given upon completion of preliminary training.

OBJECT: Team must infiltrate, negate defenses, and conduct information gathering raid. Team will collect samples of on-going projects, penetrate internal computer and seize pertinent files while disabling system. Property damage should be limited, station should maintain environment. Total destruction is not acceptable.

PHASE I: Boost to orbit from Libreville spaceport and arrive Crystal Palace. 2 week training period will commence under guidance of Guild contact.

(Cont. next page)

(From previous page)

PHASE II: Group breaks into 2 teams. First team infiltrates ESA offices. Second team covertly acquires Orbital Transfer Vehicle. Teams reunite and travel to target.

PHASE III: Teams links with target. First team penetrates computer system while second conducts search and seizure procedures for specimens. Teams exit via OTV at conclusion of operation.

PHASE IV: Vehicle rendezvous with shuttle at location to be broadcast while en route.

Team transfers samples and data and are taken to shuttle for transport to surface. Conclusion of Contract.

COMPENSATION:

\$50,000 eurodollars for each active team member, half deposited into escrow account upon contracting, balance upon completion. Training in orbital skills provided free of charge.

Access to orbital facilities and all mission expenses provided.

Mission equipment provided (other than specialized software).

If the first person did not throw the bag, a little chime comes from the device in Basimba's hand.

"Didja hear that? That meant you did somethin' wrong. You do somethin' wrong in space, you'll probably wind up dead. From now on, if you hear that chime, that'll mean one mistake you'll have to make up for later on in training. Got it?... Okay, keep throwin' that bag."

If anyone asks what the device is for, Basimba will say it's to help figure out who'll be doing the recycling chores.

Ref Notes: As Referee, you may want to have the players act this out. And just to make it interesting let the players know that each time they drop the bag, they lose one skill point due to missed training time. Have the party keep this up until Basimba leaves them at the end of the elevator ride to Hab 1.

THE GRAND TOUR

After making it through receiving, the group leaves by the same process as they entered. They are escorted onto a lift which takes them up the core of the station. It stops at a transfer point where they change to a lift traveling the spokes to #1 torus.

During the trip up the core and the subsequent trip through the spoke, your group is treated to a running monologue about the history of the Crystal Palace. Your guide is a tall and extremely eye-catching Afro-Frenchwoman named Cherice. Her hair is fashioned like a shoulder length umbrella and the skinsuit she wears takes curves like a Maserati. A memoryware chip protrudes from the back of her neck, marring an otherwise perfect image. Cherice starts the tour as the lift doors close and everyone is in their seats and belted in. Her spiel goes something like this:

"Hello, ladies and gentlemen and welcome to the Crystal Palace. My name is Cherice' and I will be bringing you to Hab #1. Meanwhile I would like to tell

you a little bit about The Palace."

"Construction began in the year two-thousand. The core-shaft we are in right now was the first portion started, with each subsequent torus added on as construction continued.

"During the year two-thousand and five, construction was slowed due to the First Corporate War. In its effort to aid Trans-world Airlines, Orbital Air was forced to use much of it's resources to counter the attacks of the corporate giant, Euro-Business Machines. This kept much needed supplies from reaching the station. But a peace was soon reached, and, shortly before the end of the year, shipments were resumed and construction continued."

Here the core lift reaches the transfer point to the spoke lifts. The doors slide open to reveal a room with another large viewing port.

The top portion of the room is made up of segmented viewing plates, opening on an awe-inspiring scene. Looking up, you see the toruses of the Crystal Palace, arching over the room like steel and glass rainbows. Fields and lakes stretched against velvety black form your sky in a vista both unnatural and inspiring.

Cherice walks towards the spoke lift and stops near the door, then points out the viewport saying...

"As you can see, the Palace is made up of five toroids connected to the main core by four spokes each. The toroids are approximately 3 miles in diameter with a toroid circumference of over 9.4 miles. In order to simulate gravity, the toroids are spinning at a rate of 7.5 revolutions per hour.

"A side effect created by this spinning like this is the Coriolis effect. Although you will not be able to feel it, your bodies will be leaning a little bit anti-spinward, meaning away from the direction of spin.

"Now, if you will please make your way

onto the next elevator and position yourselves, we will continue on."

Back on the lift, Cherice will begin her narrative as you once more start to ascend, (or is it descend?). As the group traverses the spoke, you feel better as gravity returns while you near the outer torus.

"In 2008, construction was interrupted once more, this time by the Euro-Yank war. However, as we all know, the war ended quickly. When work started again, it continued uninterrupted until the completion of the project in the year 2010. When the station was operational, there followed a year of testing and refitting. In 2011, the Crystal Palace was opened for business and pleasure.

"I hope you will all find what you have come to the Palace for. As we are now coming to the end of our journey, I would like to wish you all good luck, and thank you for your contribution to the Palace, whatever that may be.

"Now as you step off the elevator, please watch your step. You will find information stations on the platform outside, at which any question you have may be answered. Thank you once again and have a pleasant stay at The Palace. Au revoir."

INTO THE BLACK HOLE

As the characters leave the lift, they find themselves on a raised platform in the middle of a small park. Basimba leaves them at this point, saying they can find their next contact at a bar called The Black Hole. In looking around, the party can now get a real grasp of the size of The Palace.

What they see is a valley stretching up, away and out of sight on both ends, with the curve appearing to be miles away. The valley is filled with scattered office buildings, parks, and a lot of flashy sculptures and fountains, all intersected with electric tramways. To either side, they can see the walls of the torus climbing up and over them till it reaches a roof of glass where

they will see the bright sunshine of midday shining through.

With the magnitude of this project the characters might feel a little lost—but no worry—anyone with intelligence will notice a map kiosk with a keyboard in front of them. With this map, they should have no problem finding their way to The Black Hole.

The Black Hole is due east of the players, and appears at first glance to be a large hole in the wall. A holo-projection enhances this effect with a swirling gaseous mass that seems to be drawn into the apparent darkness.

TOVA

It's a short walk to the Hole; if the party wants to ride, there is a tramway. When they arrive, the characters are told they're expected and are brought to a table where they meet their contact, Tova Kusak.

A slender, dark haired woman, Tova immediately appears to be cold and aloof—a total professional. Her cyberware is subtle as is the case with most Eurosolos. Flash is replaced with functional competence. Yet, there seems to be a lot more going on underneath the chilly attitude—a certain intensity that is out of character with the rest of her controlled demeanor.

After enough small talk to dissuade any casual eavesdroppers, Tova will mention a tour that is taking place during the next work shift. She suggests that after a suitable amount of socializing, the group may want to drop their things off at the hotel, then take the tour.

If any of the characters are scanning the lounge, they can try an **DIFFICULT** Awareness roll. If successful, they will notice a man with distinct Mediterranean features casually glance away from the party.

ENTER INSPECTOR CLOUET

Andre Clouet, an Interpol agent, is seated about two tables away and one tier down. (the tables are arranged on risers in order for everyone in the lounge to get a full view of the two-story window which fronts the

(From previous page)

Team may retain any equipment issued during course of mission.

RESTRICTIONS: No carried or implanted weapons may be taken by the team to staging area. Security would be compromised by this action. Only personal luggage will be allowed, one medium bag only. Each will be given an assumed ID with appropriate documentation. Hiring is by proxy. Identity of employer restricted.

restaurant). Although he is too distant to hear what the party says, he has no problem reading their lips. Even without this skill, Clouet can read this party like a book. He sees a plot forming.

If the characters reveal Andre's interest in the party to Tova, she makes a LOW INT roll to recognize him. If Tova does recognize him, she will say nothing at the time, but will instead suggest they all leave.

After traveling in a tram about three-quarters of the way around Hab#1, the party finds itself at **The Pompador**. The rooms for the group are on the second floor and overlooking a park, which has a fantastically convoluted fountain as its centerpiece.

The fountain has dual sprays and is designed so that the water is sprayed spinward with one arching slightly east and the other west as it is going up. Then as it drops, the spin of the toroid causes them to gently loop back until the water lands in a pool which is antispinward from where the fountain originates. A nice, conspicuous waste of money, possible only in low gee.

Neat design, though.

IN THE HOTEL

Tova makes an obvious show of checking the room for taps and bugs. She finds two, probably installed by the hotel. She disables them.

As the party starts to settle in and get comfortable, Tova begins to speak:

"Okay, we all know *why* we're here, but I'm going to let you know a little more about *what* we're going to do."

"Now this first task is one even you mudballers cannot screw up. In about an hour, there's going to be a tour which will include a look at our first target. This will be as good a look as you're going to get until the actual bag job three weeks from now. But before we leave, I have a couple of *important suggestions*."

Her glare tells you these suggestions are more like natural laws.

"Rule Number One: No violence until the job starts. There will be plenty of action after we are under way."

"Rule Number Two: No freelance work—this job requires team organization and if we have people running around working out their own schemes, we'll lose our effectiveness as a team."

"Rule Number Three: Give your entire attention to the instructors who will be training you in the next couple of weeks because training is going to make or break this operation."

"Now, don't think I'm patronizing you. I've reviewed your records and most of you seem to know the requirements for completing a job. As you've probably figured out, you've been hired because you're deniable and the shoes you've been given reflect that. From here on out, consider yourselves in the sharp end, and if any of you get dirty before we hit the Street, you may as well consider yourselves MIA, because no one is coming back after you."

"Well, that's all. If any of you are hungry, there is food in the 'fridge. We'll be leaving in about fifteen minutes."

At this point, the characters may want to get a couple questions in. Tova will answer any questions as long as they don't pertain to the name and product of their target or their patron corp. After a few minutes of questions and answer, she'll decide to go downstairs and purchase a newsfax. When she returns, she'll lead the characters to the tramline which will bring them to the start of the tour.

MORE SIGHTSEEING (You can gloss over most of this if you want)

Except for the fact that this is The Crystal Palace, it seems like a tour you could expect in any major European city. High points of the tour include:

- A "lake" (at least it seems like a lake within this closed environment) and a small "mountain" (a hill), both of which have ecosystems that appear to mimic a normal environment, but on a much smaller scale.

- Stratified agricultural areas designed to obtain the different climactic features available to a real planet.

- A series of living tiers, built into the walls of the Palace itself. These structures are much like the ancient cliff dwellings of Arizona, with built in shops, emergency vehicle bays, and schools.

- Several open parks, set aside to give people the chance to feel they are back on earth.

- A-n elegant glass and iron greenhouse which is a small scale reproduction of the original Crystal Palace, built in the Great Exposition of 1851 in Hyde Park, London.

- The administrative offices of the ESA Traffic Control Bureau, which look more like an expressionistic sculpture of a sea cave than a governmental building. The characters are only shown the front of the building before being shunted off to finish the tour in a major business section of the Palace.

- Inspector Andre Clouet. Surprise, surprise.

Ref Notes: Find out the positioning of the party and then place Tova in the rear, where she stood to see if anyone was tailing them. This will put those characters that were toward the front in the position of decision making during this next confrontation.

At the end of the tour, Tova recommends they head back to the apartments to discuss the next phase. The characters, however, don't get far when from around

a corner, a short and rather stocky man steps out to block their path. Combat reflexes may trigger in the group, but Inspector Clouet wastes no time in introducing himself.

"Good evening messurs and madames and welcome again to the Palace. I hope you have enjoyed your tour; also that your research was beneficial.

"But pardon' moi, my name is Andre Clouet, Inspector Andre Clouet, of Interpol. I have come here to let you know that this station is under my jurisdiction, and that you can expect a wonderful time as long as we have no troublemakers causing problems, if you comprehend my meaning, hmm?"

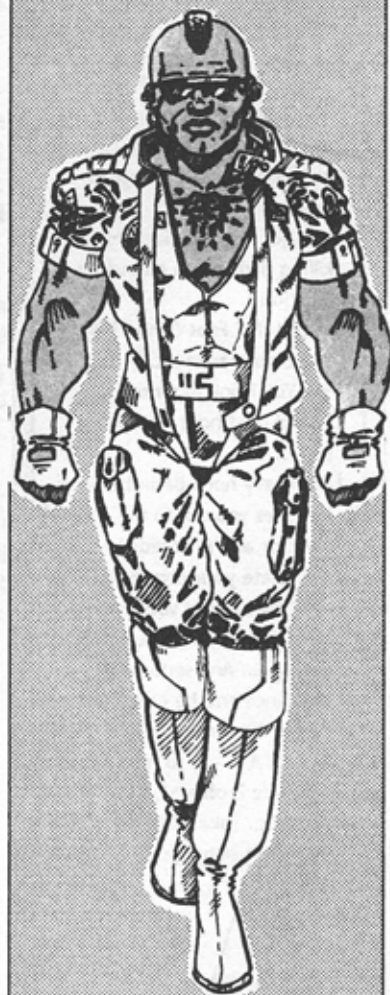
He will pause for an answer, giving the party a sidelong glance, in the hopes of drawing out some reaction from a possible rowdy. If he is asked (or actually even if he is not asked) why he is "harrassing" the party he will explain that...

"I quite often go over the new arrivals list in order to get an advanced warning of those I might meet professionally, and, in the case of your group, introductions also seemed in order."

"Now, it is not my wish to take up too much of your time, but I would like to point out something before I depart. There is scarcely anywhere you may go in the Palace without being seen. And I'm afraid that if you insist on traveling in some of the more...inaccessable areas of the Palace, I will take it upon myself personally to search you out, just to make sure you are not in any trouble. That is the kind of service I give, and that is the kind of service you may expect from my people.

"But I do not mean to inconvenience you, so without further delay, adieu and au revoir."

With that, he spins on his heel and departs. Clouet has dropped his hook in the water. He will wait to see what bites.



NO PAIN, NO GAIN

Wait a minute, you yelp. What about acting out all the complex testing and training? How do I determine who washes out? Simple. You don't want them to wash out. No players, no adventure, right? You just want them to suffer a bit. Every so often, have them try to accomplish an AVERAGE task with the new skill. If they fail...let 'em have it.

Failed REF Feat (roll 1D6)

1-3 Embarrassment

4-5 Minor injury. Take 1D6 in bludgeoning damage to a random location.

6 Major injury. Take 1D6 in killing damage to a random location.

Failed INT Feat (Roll 1D6)

1-2 Embarrassment.

3-4 You honk Basimba off. Spend next hour doing situps.

5-6 Really honk Basimba off.

He takes you out to the corridor and proceeds to "stimulate your concentration" by beating you to a pulp. Take 1D6 in bludgeon damage... Any serious resistance and he calls the rest of the senseis (REF 11, Martial Arts +8) to help out. "Attitude Problem", he explains...Take 3D6 in bludgeon damage...

Tova herds the team back towards the hotel, but the decadent elegance of the tourist section beckons. All manner of distractions are advertised: music, drink, companionship...all at prices ten times normal. But that's what expense accounts are for, right?

If the group feels the urge to party tonight, Tova warns them "Don't stay out too late because training starts early. Those that can't handle it will be shuttled back down mudside, without pay."

A serious night of partying could follow with all the usual consequences. The next day at 0500 hours PMT (Palace Mean Time), Basimba pulls them out of bed (and we do mean pulls), and loads them into the lift to the core.

Ref Notes: The two week training period is more intense than any the characters have experienced before. Everyday, it's up the spokes to Zero-Gee rooms for maneuver and combat lessons under senseis that would make Jump Marines look like wimps. Bouncing off walls or stewing under MRAM chips, it is obvious that they have a lot to learn in a very short time. Basimba and his fellow teachers allow no room for error. Survival in space demands that the players learn right the first time.

During training, Tova will introduce her private tech, Arne Grieg, who will make sure the team's cyberware is operating properly (he has no specialty ammunition for cyberweapons, however). If the party lacks a Tech, he may be convinced to go along, albeit, reluctantly.

Tova's threats aside (and Basimba's for that matter), we're going to try to get through this training period quickly, so we can finally get into the action. Here are some simple guidelines to go by.

Give the the characters each 100 IP (less any lost in the bag throwing) and allow them to distribute them however they wish among their Orbital skills, as long as they do not exceed +3 in any one skill. MRAM Chips will also be available in all skills for you to distribute as you see fit, but no higher than +2.

TOVA KUSAK

ROLE: SOLO

INT 8, REF 8, TECH 7, COOL 8,
ATT 8, LUCK 6, MA 8, EMP 8.

CYBERWARE: Interface plugs, Biomonitor, Reflex Booster, Memory software (Spacecraft Mechanics +2, orbital navigation +2)

SKILLS: Combat Sense +4, EVA +4, Astrogation +5, Z-G Manuever+4, Martial Arts +4, Z-G Combat+5, Pistol +5, Rifle +3, Stealth +2, Basic Tech +3, Pilot OTV +1, Streetwise +1, Space Survival +2, Awareness +2, Melee Weapons +1, Wardrobe & Style +2, Shadowing/Ditch +1, Human Perception +2.

OUTFIT: Smart-chipped fletcherette shotgun, Armor jacket (not worn with space suit); IR goggles, pilot suit, a whole satchelfull of micronized gimmicks, including bugs, bug detectors, small explosives, etc., Several fake Orbital ID's under various aliases.

PERSONALITY: Motivation: professional aesthetic and desire to excel; Competence: Very competent. Agressiveness: Reserved unless the situation warrants action; Glitches: Basically ethical and empathetic in a business where these are disabilities, Hides emotions which may appear as weaknesses (which means most of them.) Can go berserk in combat.

COMMENTS: Tova was born in Russia and was raised there as a child til the Food Crash of 2002. Her family was able, under desparate conditions, to immigrate to Germany. After a brief and eventful apprenticeship with a biochemical concern, she skipped, changed her identity, invested in some cyberware, and went freelance. Tova seems about as friendly as an H&K subgun, but this is her public face.

Somewhat empathic at heart, she overcompensates with a cold and arrogant attitude.

Tova has (unlike the rest of the party) been fully briefed on the mission up to and including the retrieval and handing over of material gained in the raid. This includes names, places and times. But she has been

trusted to give up as little of this as possible to the party, except on a need to know basis.

ANDRE CLOUET

Role: COP (Interpol Agent)
INT 9, REF 7, TECH 5, COOL 8,
ATT: 6, LUCK 5, MA: 6, BODY 4,
EMP 7.

CYBERWARE: Interface plugs

SKILLS: Authority +10; EVA +4, Z-G Combat +5 Martial Arts +3, Pistol +4, Driving +2, Athletics +2, Pilot OTV +1, Z-G Manuever +3, Awareness +5, Spanish +3, English +4, German +4, Japanese +4, Italian +3, Russian +4, Stealth +5, Disguise +3, Shadow/Ditch +4, Gamble +3, Basic Tech +2, Cyber Tech +1, Photography +2, Thief +1, Human Perception +3, Interrogation +4, Streetwise +3, Intimidate +2, Wardrobe & Style +3.

Outfit: Smartchipped fletchette pistol, armored jacket, cleaned and pressed uniform, small writing pad w/pen.

PERSONALITY: Motivation: strong sense of duty, curiosity, Competence: brilliant and subtle, Aggressiveness: forward but calm. Glitches: has a facade of being an ineffectual bureaucrat, cunning, disdains overuse of cyberware.

COMMENTS: Andre is a fisherman's son from Toulon on the French Riviera. From earliest childhood, he has had a fascination with solving puzzles—a skill which now serves him well as the head of INTERPOL's offices on the Palace.

Andre is a sophisticated bureaucrat, for he's found that people tend to let their guard down a bit when confronted by someone living by rules and regulations. But when it comes to getting the job done, he is like an efficient machine, guided by instincts honed to a cutting edge.

After he sees the characters in action he quickly realizes that they're small fish, but that they're also the bait he needs to pull in the big ones.

After all, he is a fisherman's son.

ARNE GRIEG

ROLE: TECH
INT 7, REF 7, TECH 9, COOL 6,
ATT 6, LUCK 8, MA 6, BODY 4,
EMP 4.

CYBERWARE: Cyberoptics X1 w/ micro/telescopes and image enhancement, Memoryware w/ Medical Tech +3 & Software Design +3, Interface Plugs, Special Cyberhand w/ built in electronic tools.

SKILLS: Scrounge +6, EVA+4, Pistol +1, Awareness +1, General Knowledge (Technology) +3, Specific Knowledge (Micro-electronics) +6, Pilot OTV +1, Basic Tech +4, Cyber Tech +5, Computer Tech +2

OUTFIT: Smart-chipped fletchette pistol, Micro-electronic analysis kit, Pilot Suit, Z-G coveralls, mirrorshade eyepatch (removable) over cyberoptic, carry bag w/full set of tech tools.

PERSONALITY: Motivation: technical expertise and pride; Competence: above average; Aggressiveness: restrained; Glitches: cold fish, engrossed technophile, mainly works behind the scenes so is not used to field conditions.

COMMENTS: Of German origin, Grieg is a technophile. He and Tova have worked together on several missions, with Bauer Corp. supplying the technical support and set-up, and Tova performing the field work.

His experience is largely in mission preparation and if he accompanies the party on this raid, he must make a COOL Save (roll under his COOL on 1D10) or he cannot perform his task under combat situations.



BASIMBA

ROLE: WORKGANGER

INT 6, REF 10, TECH 8, COOL 6,
ATT 4, LUCK 7, MA 6 (EVA 8),
BODY 10, EMP 5.

CYBERWARE: Reflex Boost, Plugs, Biomonitor, Memoryware: English +3, German +2

SKILLS: Workgang +9, EVA +8, Z-G Manuever +7, Z-G Combat +6, Brawling +5, Pilot OTV +6, Melee Weapons +5, Pistol +1, Rifle +1, Awareness +3, Specific Knowledge (Engineering) +2, Gamble +3, Teaching +4, Basic Tech +2, Fast Talk +3, Human Perception +2, Space Survival +3, Intimidate +4.

PERSONALITY: Motivation: sense of duty, Competence: extremely competent, Aggressiveness: Calm but stubborn,

Glitches: strong sense of self and family, good sense of humor, will not take any guff from the team members.

Outfit: Orbital clothes in flamboyant colors, OA corporate credit card. Basimba carries no weapons, relying instead on his considerable strength.

COMMENTS: Basimba was born and lived most of his life in Zaire, Africa, until EBM contracted his tribe for work in orbit. With poverty and famine as the only other option, they took the trip. Now, ten years later, he is one of the most experienced members of his tribe. His knowledge of orbital work is purely practical, but this has not proved a disadvantage (in fact, it may work in his favor). Basimba doesn't know why the characters are in orbit, but he doesn't really care. They paid him, right?

HITCHIN' A RIDE

As their training reaches an end, the team will get a couple of evenings free to check out some of the local features of the Palace. During their sorties into decadence, they will probably note that they are being tailed by a nondescript young woman, Bridgette Hemons (see character descriptions). Have characters make a DIFFICULT Awareness roll (the tail is fairly good) til one of them notices her. If the group tries to approach her, she will dodge away into the crowd and pick up the group later. If they try an innovative plan to trap her, let them, but if they get close to her, she will scream rape, call for police, and spray everyone in the area with a small mace bomb (AVERAGE roll against REF to avoid; -2 to REF if



avoided, INT and COOL reduced to 1 and REF and MA halved if not; effect lasts 15 minutes). When the gas clears, she will be gone, and the PCs may face some angry bystanders.

The best way to lose her is to do just that: Have the group use their Shadowing/Ditch skills to leave her behind (a DIFFICULT roll, let the best skill in the group use his level as long as they stick together. If they split up then roll to see which group she follows. Awareness rolls must again be made to confirm tail). Let them try til they succeed since they cannot proceed with the next step until they learn to do so. Tova will sweep their quarters for bugs more frequently after this.

On the last day of their training, a large shipping container marked **GYMNASTICS EQUIPMENT** arrives at the staging area. Tova tells them to open it in a private place as this is actually the equipment for the mission. The inventory is as follows:

Each member of the team will receive:

- 1 armored pilot suit (SP=10) w/ short-range communicator. Two suits are in OTV pilot colors.
- 1 Militech "Black Widow" fletcherette pistol (smart chipped if applicable) w/4 clips.
- 1 shotgun for each solo (their preference, and smart-chipped if applicable) w/40 rounds each.
- 1 set Intertech IR goggles.
- 1 fighting knife.

In addition, the team also receives:

- 1 tank of Nachtjager Riot Suppression Gas (10 kgs.)
- 1 Bio-Safe™ satchel, designed to carry bio-hazardous materials without risk of exposure. A special flap allow new items to be inserted without breaking the seal.
- Aztec 600 Assault Programmer cybermodem w/cables.
- 4 Mitsubishi tasers, fully charged.
- 2 sneak suits (Tight, black, light-absorbent bodysuits w/hoods. They

also reduce IR signature; -4 to Awareness rolls to spot in low-light conditions).

- 2 short range (5 km) scrambler radios.
- 15 smoke grenades (can be dangerous in enclosed situations).
- 1 set of cargo handler coveralls for each member of Beta team besides the two who will be OTV crew w/ID tags.
- \$15,000 Euro on a credit card for "expenses." (Tova will handle this. No arguments, right?)
- CD with label: "Play on secure. private player, then destroy."
- Small box marked "For netrunner."
- False ID tags for the entire party.

How they get all this to their rooms is up to them.

The info disc outlines the target: the Dornier-Bauer Biotechnische orbital lab. The file includes orbital coordinates and a corporate profile (see Technical Notes). That's about it: no real specifics are available. The team must obtain plans of the place from the ESA Traffic Control system (which has plans of all registered workshacks on file).

The team must raid the lab, gather samples of ongoing projects and rifle the computer system for info, especially a file named *Project Gegenbauer*; the netrunner is expected to come back with this file intact.

At least now they know where they're going.

The netrunner's package contains an electronic key, a program chip, and a small note:

**OFFICE #MAUVE 23,
ESATC, 2000 HOURS PMT
FILE CODE ANAXAGORAS**



Firestorm**Class:** Data Codecracker**Strength:** 6

Firestorm is a high powered codecracker designed for espionage work. It works basically like Wizard's Book but can burn through what it cannot decipher. Very illegal.

Appearance:

All Interfaces: A stream of flaming or glowing words and numbers appearing in a whirlwind before the code wall. A stream of light will strike the wall until the door is blown open.

These are for the next step of the job, the ESA break-in. The plan is for one part of the group (Alpha Team), the netrunner and a quick solo, to get into the Traffic Control Net, extract mission data and implant false info.

Normally this would be done in the Net without entering the office physically, but the Palace's Net is so small that detection is easy and the intruder's location can be found quickly. An inside job is far easier and safer. The rest of the party (Beta Team) will wait at a nearby point for the info to be radioed to them so they can make the move to hijack the correct OTV, masquerading as crew and dockworkers. Meanwhile the runner team extricates themselves and rendezvous with B Team at the docks.

The netrunner should run the chip on his cybermodem. It contains two false OTV pilot IDs (to be planted in the ESA computer), some info on building security, plus *Dragon* and *Firestorm* programs. The runner will have to supply his own *Invisibility* and accessories.

Ref Notes: Let the players see the ESA Office Map (pg. 80) so they can make plans. Do not let them see the ESA Net layout. Tova advises the break-in team to travel light and only take gear for Net access and self defense, leaving behind anything that will slow them down (like armored jackets). The sneaksuits are perfect for this task and can be worn under most clothing. Weapons should be limited to concealable pistols and tasers. This part should be kept bloodless.

If the group hasn't already figured it out, Tova will point out that their tail will be waiting to pick them up as they leave their quarters and that they should plan accordingly. The party will probably split up at this point and let Bridgette decide who she will follow. Exiting the back way or taking her on a wild goose chase through the entertainment facilities are both possibilities. At any rate, they must move quickly as they are on a deadline.

ALPHA RUN

Alpha Team must inconspicuously cross to the business torus. One way would be to dress in fancy street clothes and pretend to be wayward party-goers stumbling into the business district. The players could have real fun with this, but can't be too obnoxious without drawing undue attention (and security personnel) to themselves (Streetwise and Fast Talk could both be used here).

Or Alpha may try to ninja their way over by moving through the shadows in their sneaksuits (use Stealth vs. an AVERAGE task). This could prove very amusing if they have to use elevators or some other public conveyance to reach their destination ("Say clobber, nice outfit! I love the lines! What shop cut it for you? I simply must find one!"). Eventually, Alpha Team will reach the ESA offices in Hab 2. Read them the following description:

The low building sweeps and curls before you like a surf-carved cliff face, but where no sea has ever rolled. Based on the Casa Mila' Hotel in Barcelona, the ESA public offices use plas-foam to form a rock-like facade that appears as erosion-worn stone. Sea-cave openings frame windows and doors, most of which are dark and ominous during this night-cycle; the rest give off a suffused aqua glow with the low-level night lighting. The red eyes of security cameras peek out from crevices like furtive wharf rats watching for unwelcome visitors.

The employee entrance is a blue-lit oval on the left corner; the door the same texture as the walls with an ornate brass mermaid door-knob (how quaint) next to the key slot.

Normally breaking into this kind of facility is a royal pain, but this group has some advantages: they have a pass key, it's not a high security area, and they have a layout of the building. We can assume they have lost their tail by now.

If they are smart Tech-types, they could adapt their radio to monitor the internal

security band, should they think of it (DIFFICULT). Slipping past the cameras should be tougher. The info chip will reveal that the cameras are only viewed periodically by the security crew and has given them a probable schedule to time their entry by. There are no motion sensors, but the cameras do have IR.

Timing must be fairly quick as the team must pass a sequence of cameras on their way upstairs. Have them make a series of Stealth rolls (AVERAGE) to keep them moving and tense. Have cameras turning to track their every turn, odd shadows glimpsed around corners, and the occasional wandering guard or late worker passing by. Even if they blow a roll there is a 50% chance that their sneaksuits will make them unnoticable. Emphasize the eerie, cave-like quality of the building, which is no doubt soothing in the day cycle, but when seen in the dim, blue, night-cycle lighting, gives the impression of being in an underwater grotto.

The door to Mauve 23 is locked, and the pass key doesn't work on this one. Oops. This unexpected obstacle means that one of the team must make an AVERAGE Basic Tech roll in order to gain entry into the office. The character attempting this will have two tries before the camera pans around to view the team and the guards start coming.

Are their hands shaking yet?

The office is a fairly sumptuous example of executive chic. A brief survey of the room (and brief is all they'd better take) will reveal that there are no obvious bugs or cameras and the office normally belongs to Daniel Eldon, a British ESA exec. Some serious money must have traded hands for them to gain entrance here.

The runner can seat himself behind the curving desk (yes, the interiors are done in the same motif as the halls) and plug his modem into the desk access port while the solo keeps watch. Use the ESA Net Map on pg. 82). The Ref should note that the runner is accessing via a workstation port.

THE RUN

Immediately after entering the Net, the runner will hit a defense block that was not on any schematics he has seen. What is even stranger is that it seems to be empty except for a slight spark which can only be seen at the periphery of vision. The runner will, no doubt, be cautious (wouldn't you?) but can pass through unmolested.

This is a very subtle *Watchdog* program (Strength 4) which alerts ESA security if anybody is using a workstation and indicates what station is active (*Invisibility* does not work). At this moment, a security officer is focusing on his console (and probably spilling his tea) as a supposedly empty office is accessing memory.

Assuming it is an office worker staying unexpectedly late, he will dispatch a roving guard to make a friendly check on the workstation. She should arrive in about two minutes.

After hitting the main processor, the runner needs to go for standard memory (Section A) to get the supply run and lab specs data. The ref should populate the defense frames based on the runner's abilities. Remember: he has a high-powered Cracker and Killer with him, so don't be too gentle. This is not an ultra-secure system, so there are no live runners watch-dogging. Once into file *Anaxagoras*, the Ref can read the appropriate sidebar description aloud. The transaction will take place in one of these respective environments.

The system transfers data by giving the runner scrolls to carry (the files) and the runner can plant the false ID data by giving him the proper scroll (the runner had best get the original file before doing so, however, or there will be more than one ID on file for the crew).

Sometime about now, there is a knock on the door. A female voice inquires, in both French and English, 'Who's in there?' The players can try to fake an answer, but the guard will enter the room regardless to visually check things. How the players deal with her is up to them, but it should be

IN THE NET:

In Dungeon: You seem to be stepping into an ancient Greek temple, passing row upon row of Ionic columns. Before you, seated on the steps of the structure, is a bearded man in a toga; the very epitome of the classical Greek philosopher. "Welcome, seekers of knowledge. What aspect of wisdom do you seek today?"

In Tronnic: Chrome columns sweep by while clouds roll around you. Suddenly, before you looms a huge mask in the form of a Greek scholar. The empty eye sockets flash with a sudden blue light as the glittering bronze face speaks, "Welcome to the interface of wisdom. What noble file do you require?" Pretentious, isn't it?

In Mega-City: You step through a dingy doorway into a small shop full of dusty books and old scrolls. The door says 'Leo Anaxagoras, Researcher'. An aged, bespectacled, man moves from behind the counter while adjusting his sweater. "Welcome to my poor library of knowledge. How can I help you today?"

quiet, quick, and preferably non-lethal (they don't need that kind of heat on their backs).. Use the ESA Guard on pg. 62.

ALL HELL BREAKS LOOSE

Whether the guard raises the alert or not, when her biomonitor shows her unconscious (or dead), the main desk will issue an alert and send four more guards to investigate. Activity on the security radio and the regular lights coming on will clue the team to the fact that they have been made. If the netrunner is really ambitious he can go for station personnel listings and defense capabilities (stored in section B), but it will take time that can put them in jeparody (an additional twenty seconds).

The solo should be chomping at the bit by now, and ready to unplug the runner himself. They have thirty seconds to get to the stairs or another exit and they will be under the gun the whole way. This is a chance to play things fast and furious as the team radios the shuttle number to Beta Team and struggles to avoid security on the way out. Doors may be locked and need to be blown, security will blaze at them with pistols and shotguns and things will generally be *intense*.

If they make it out, they should be able to lose their pursuers in the surrounding alleys. A quick change into street clothes and they can walk out of the area complaining about all the noise and asking about the nearest tavern. A sobering sight will greet them as they leave, however, as they see Agent Clouet driving up to the ESA office and engaging in conversation with the security guards.

If Alpha Team isn't quick or lucky enough, they may be caught or killed before they get out of the building. If killed, well, they contribute to the organic matter content of the Palace (*People are Protein!*). If caught, things can still take an interesting turn. After being cuffed and questioned intially, they will quickly find themselves facing Agent Clouet in a small office in the ESA complex. Read this segment:

Clouet paces slowly, examining you and the reports, his face drawn and eyes nar-

rowed. While his Cardin uniform is perfect, there is something different about him now. You feel you are under the gaze of a hardened professional, all semblance of punctilio gone.

"I knew you would end up, how you say, knee-deep in *merde*."

He smiles with even, white teeth.

"Now, in order to keep things from getting any further out of hand, I want to know what you were doing and for whom you were doing it. Cooperate and I can keep you from becoming vegetables; don't and you will face the full penalty for your actions which I will take great pleasure in applying..."

His face is not quite sadistic, but ...

If they don't cooperate: It's braindance time. Interpol is the Law, and Clouet is Interpol. Write these guys off for a long time.

If the players cooperate: Clouet will listen and ask pointed questions until he has a good idea of what is going on. If there were deaths involved in the break-in, then Clouet will reduce the charges to manslaughter and have the players face trial, but he will track the activities of the rest of the party. If the break-in was bloodless, however, and the players are helpful, then Clouet will put a proposition before them.

"I want you to continue with your mission, rendezvous with your fellows, and perform your raid. But, when you are back, you will report to me and give me all the information I need to bring in your patrons. I do not want you; you are only tools. I want the minds behind you, whoever they are..."

He pauses to light a thin cigarette. The lighter flare is reflected in cut-diamond eyes; a hard smile twists one side of his mouth. Smoke curls away from his face, but his gaze rivets you to your chairs.



"I will give you protection, but you will now be working for me."

With this the characters are released and the news of the break-in suppressed, so that they can rejoin Beta Team at the docks. Their interrogation has only taken thirty minutes (thirty lo-o-o-ng minutes). What they tell the rest of the team is up to them.

BETA TEAM BLUES

While Alpha is getting in deeper, Beta has the possibly even greater task of moving the heavy gear to a spot where they can wait for the data transmission. Each character will have about one large suitcase worth of supplies to haul. They must remember that the docks are in the zero gee area of the Palace and had better pack so they can handle the load under those conditions (Z-G Maneuver Skill).

If they decide to stay relatively close to Alpha team (and on the toruses), they will need to come up with a way of not drawing attention. The best move would be to make reservations on a shuttle down the well. This would give them a good excuse to hang out in the docking core with a lot of luggage.

THE FLOATING WORLD

The Floating Worlds Lounge in the Earthside dock is slick and expensive. Exotic drinks in collapsible bulbs are served along with holographic, zero gee eroticism. The passenger transfer areas are plush, clean, and well-organized, bustling with corps, courtesans, and bodyguards.

At the other end of the station is another world. The orbital transfer port was once as elegant as the Earthside facilities. But the demand for orbital traffic soon necessitated more docking ports and cargo facilities than the original plan allowed for. New modules were brought in by ESA and Corps alike; equipment was forced to link in ways never intended, the tangle growing like a crystal. Soon the port expanded beyond the capabilities of Palace security to monitor and a sort of no-man's land appeared.

Here cargos from all around LEO come to trade hands—some legal, many not. Security varies from terminal to terminal, and, as long as contraband doesn't enter the station proper, it goes uninspected and unquestioned.

Assuming Alpha does its job, Beta will get a scrambled radio signal indicating the OTV they want: the *Louis Bleriot* at Dock Module 14. If they think to inquire at a library terminal about docking module layout (Tova may suggest this), show them the Docking Module 14 Map on pg. 87 so that they can make plans with real information. The team should move immediately to the docks as they only have sixty minutes until the scheduled launch.

The most direct path is via a tram which runs down the length of the core. They can get an express car and change into their false IDs along the way. They ought to be able to masquerade their way into the docking area and secure both docking platform and OTV without alerting station security. The assault on the platform must take out the dockworkers (pg. 62) and prevent the OTV crew from calling for help. Timing is essential. Keep in mind that this whole area is in Z-G and conduct maneuvers accordingly. Gunplay is not recommended due to the chance of blowing out a wall (not to mention the noise).

THE DOCKING AREA

All docking areas have one bored guard checking IDs while cameras monitor general activity. These are mainly scanning for the unusual, and as long as the party keeps a mellow profile, they should be able to slip past. Thanks to the netrunner, the characters chosen to be the OTV crew should have IDs on file and they can use these to get the rest of the team through the checkpoint which lies between them and Docking Module 14. An AVERAGE Fast Talk roll will allow them to get unregistered party members in. If the Ref wants to spice things up, he can choose to bring in the special character of Otana, the bored Masai warrior-guard (pg. 62). Don't let things get out of hand. While this is a relatively easy situation if the groundwork has been laid, the Ref should play it for all the tension it is

The elevator compartment is filled with the clicks of weapons being readied and the murmur of low, anxious voices. You become aware of the cold hardness forming in the pit of your stomach: that feeling that always comes right before an action. This time it combines with the slight nausea of null gee. The orange aiming pip flashes across the inside of your eyes as you test the link with your Widow. You take a deep breath of the tinny air, get a good grip on the handhold, make sure your gun is hidden, and ready yourself as the lift hushes to a stop. Your adrenalin pumps up as the door slides open, but all you see is an empty loading platform, storage mods held fast in nylon webbing. Beyond is a closed airlock hatch, washed pale by humming fluorescent lights. You realise you're holding your breath and exhale; the tension flowing out with the air. Then you hear a man's voice call a question in German, and you know that now is the time to move...

worth, with sidelong glances from the guard and an unusually long time for verifications to come up on the screen.

Go ahead, make 'em sweat.

JAMMIN' AT THE OTV

As the players come up the elevator, they'll have time to prepare their equipment for the hijack. They can expect the OTV crew and at least two cargo handlers in the module time. The module has cameras, but they are only activated to monitor emergencies, so as long as the team pulls things off fast, no alarm will be raised.

If they saw the plans, the players will know the layout. Regardless, they should now see the Docking Module Map (pg.87) and implement whatever plans they have made. Once the doors open, don't allow them a great deal of time to deliberate. If they do not move quickly, a handler will drift around the pillar to check out the new arrivals. There are three cargo handlers on the platform and two crewpeople on the Bleriot.

One tactic might be to have the players pretend to be another vehicle crew (there is another OTV docked here) and buddy-up with the platform crew. This is harder than it sounds, since the team are mostly new to Z-G and could appear clumsy. Make an AVERAGE Z-G maneuver roll every other round for active characters. A failed roll indicates a slip. Make an AVERAGE roll with a Human Perception skill of +1 (EMP 5) for the dock crew to notice this and become suspicious. A DIFFICULT Fast Talk roll by the party could alleviate this.

Once things cut loose, roll to see if Tova berserks during this combat (a COOL roll vs a DIFFICULT Task). If she does, she won't use deadly force, but the players should clear her space, as she will take on as many opponents as are in her field of vision, and may throw one or two unnecessary punches. Don't make her too much of a menace, however, as she must retain the respect of the team.

The other obvious tactic is to dive out of the elevator into action (which is very risky and throws timing out the airlock). If the players come up with another plan, fine, but it should involve all the elements we have mentioned to have a good chance at success.

Although the dock workers are unarmed, they are more experienced at Z-G, so combat should prove a challenge. Smoke grenades, tasers, and Z-G Combat (remember, there's no gravity on the spacedock) are the best weapons in this fracas since gunfire is too loud and will alert other docks. Guns can be great intimidation tools, however (EASY Intimidation Roll). The workers will not defy a well-handled fletcherette pistol, but if the players are forced to use them, their silence is blown.

One worker might (25%) still try for the alarm. There are com panels next to the inside door of each cargo airlock. As a safety factor, the Ref may want to give Tova one of the tasers so she can zap any worker who gets near a com panel. If things are really blown and the alarm is sounded, the player might try to Fast Talk (IMPOSSIBLE) the dock security, saying that it was an accident and that everything is okay ("We have a slight radiation leak down here...Big leak..Very dangerous...").

During the excitement the crew of the OTV should become curious about the noise. If they are not neutralized quickly (three combat turns), they may alert Traffic Control about the intrusion and put a damper on the whole thing. If the players succeed in fooling the dock crew so they can get near the OTV, hijacking could be as simple as pointing a gun into the pilot compartment and saying "Freeze!" Both airlock doors are open, which is a direct violation of procedures, but crews often do this to speed loading). These guys are made of sterner stuff, though, and the Intimidation roll is AVERAGE to immobilize them by waving a gun around.

Reasoning with the crew at gunpoint has slim chance of working (DIFFICULT Fast Talk Roll). Otherwise, it's tasers and fists. Direct combat in the confined area of the cockpit will reveal the surprising nature of

one of the pilots (see Toby Scannelli in the **Characters** section, pg. 63). He will prove a formidable opponent (or possibly an ally).

OKAY, NOW YOU'VE GOT AN OTV...

After the smoke clears, the team should be in control of the dock. If no alarm was raised, they can transmit a request that the personnel from Alpha team be allowed to pass through to the OTV as last minute transfer passengers on their run. Depending on how long the action took they may have 5-30 minutes to kill before their launch window of 2100 PMT.

How they deal with the five prisoners they've collected can prove a bit of a problem. There are two basic options: Truss everyone up and throw them in a suit locker or truss everyone up and throw them in the OTV cargo compartment. The crew will be discovered within an hour in the suit locker and an alarm sent out. On board the OTV, they will be hidden and any mystery may not be directed to the *Bleriot*. The players will also be guilty of kidnapping. Bribes for silence are strongly recommended.

TOBY

"You'll need somebody who knows this ship," the pilot quips. This guy is entirely too cheerful under the circumstances. The half-suit he wears is covered with USAF campaign and unit patches; a form of textile tatoos.

"We've changed enough of this baby so's she ain't no standard hauler. You can hire me to help you or you can find all the changes yourself... out there." He motions towards the airlock and the void beyond.

Toby Scannelli is a the main OTV pilot and a general hellraiser. If properly approached, he will see this as an opportunity for serious excitement. If the party offers to buy his silence, he will go one further and offer his services on the raid, for a fee. He asks a price of \$8,000 Euro, but the money isn't really important. Anyone making an AVERAGE Human Perception Roll can tell he is

sincere (if not a *bit* weird). If Toby is subdued in the fight and unwounded, he will regain consciousness in time to make the offer himself. Taking him along should be encouraged since he can prove both useful and colorful. If the players don't take him, all task rolls regarding control of the OTV are one level higher than usual to reflect the "unique" modifications made to the *Bleriot*.

You can probably buy off the other pilot.

There are two pilot couches and four passenger couches, which may be fewer than the party, especially if Toby goes along. Some of the characters may have to make do with hand holds or the cargo deck. Since the acceleration is fairly light for this ship—1/10 gee at best, it is unlikely anyone will be too uncomfortable. Things are a bit cramped though and the two hour long ride may cause some fatigue.

All loose gear should be stowed in the netting along the wall of the passenger deck—just move aside the Japanese girlie holos. The whole interior has been heavily reworked from stock and it shows in weld marks and mismatched plastic panels. The control board has also been "personalised" and would take some time to relearn, although the cyber interface seems standard (although the software is not). The air is recirculated sweat, tolerable but undeniable.

The players will have to deal with Traffic Control themselves since they are now the registered crew. Toby can still pilot the ship but the players have to do all the talking (EASY Astrogation roll). Once they've gotten the all clear to disconnect they can seal up and pull away. The pilot sets course (AVERAGE Pilot Roll) for the Bauer Biotechnische Werkstatt and the thrusters flare silently against the cold darkness...

IS THIS A BRIBE, OR WHAT?

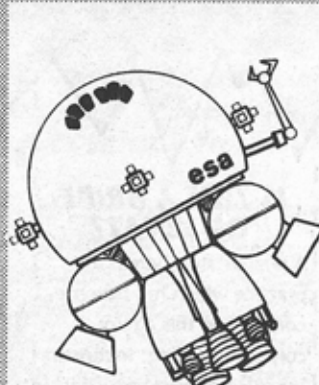
A n alternative here is a practice which has become common in this age of corporate raiding: **Inconvenience compensation**. This amounts to a payment voucher issued to the individual in compensation for injury and distress incurred during a corporate "function" as long as no charges are filed.

Each of the dock crew can receive \$1000 Euro and medical coverage through the Guild on the waiver of legal action. Orbital Air can be compensated for the "unofficial charter" of their vehicle. If an additional \$1000 each is arranged, then perhaps (Roll AVERAGE on Fast Talk) the people will agree to say nothing for a period of 24 hours. Time to break out the credit card?

This is only possible if a bystander has not been killed or seriously wounded in the action.

NEAR ORBIT

ADVENTURE



Aerospatial LV 6 Orbital Transfer Vehicle

L: 20m, **Diameter:** 8m
Wall SP: 7SP,

Thrust: LOX thrusters
capable of .12 G,
Maneuver thrusters.

Crew: 2, **Passengers:** 4,
Cargo: 40 cubic me-
ters

Equipment: Long
range radio, radar,
Dassault Nav Com-
puter cyber compati-
ble, Rockwell life
support system, Two
Revell heavy manipu-
lator arms externally
mounted and cyber-
linked.

BRIDGETTE HEMONS

ROLE: SOLO

INT 7, **REF** 6, **TECH** 4, **COOL** 6,
ATT 6, **LUCK** 4, **MA** 6, **BOD** 6,
EMP 5.

CYBERWARE: Cyberoptic w/image en-
hancement, cyberaudio w/remote pickup

PERSONALITY: Energetic and loves the
streets. She gets the most pleasure from
accomplishing her assignments without
any hitches.

SKILLS: Combat Sense +2, Z-G Maneuver
+5, Z-G Combat +2, Martial Arts +3,
Shadow/Ditch+3, Stealth+3, Fast Talk+4.

OUTFIT: Red and white pantsuit, a mace
bomb in her hand bag (her only weapon).
She is also carrying a short range, compact
radio transmitter.

COMMENTS: Bridgette is an independent
operative hired by Interpol to keep track of
the party. She is simply material for stress-
ing-out the characters and by no means
should she be captured.

ESA SECURITY GUARDS

ROLE: SOLO

INT 5, **REF** 6, **TECH** 3, **COOL** 5,
ATT 5, **LUCK** 5, **MA** 6, **BOD** 7,
EMP 3.

CYBERWARE: Biomonitors linked to the
security office.

PERSONALITY: Official and meticulous
about their responsibilities.

SKILLS: Combat Sense +4, Pistol +3, Rifle
+2, Brawling +3, Athletics +1, Z-G Maneu-
ver +2.

OUTFIT: Armor vest (10 SP), flechette
pistols and light shotguns. Some may have
smart weapons at the Ref's discretion.

COMMENTS: These people are not stupid
and will not give themselves over to being
cannonfodder. If wounded they will retreat
and call for back-up. Killing them is a
serious criminal offense.

OTANA

ROLE: SOLO

STATS & SKILLS & CYBERWARE: as
per ESA Security except REF 9, a
skinwatch and rippers.

PERSONALITY: a warrior, vicious and bored
(a bad combination).

OUTFIT: Jumpsuit, flechette pistol.

COMMENTS: Otana is from Sudan, which
has a proud warrior tradition. Still, there
isn't much chance to prove your warrior
mettle here on a civilian space station. He's
spoiling for a fight.

DOCKWORKERS/ CARGO GRUNTS

ROLE: WORKGANGERS

INT 5, **REF** 6, **TECH** 6, **COOL** 4,
ATT 4, **LUCK** 4, **MA** 6, **EMP** 3.

CYBERWARE: Interface plugs (one has a
cyberarm with no accessories, REF with
that arm+1)

PERSONALITY: "Hey, man, let's party."

RELEVANT SKILLS: Workgang +5, Z-G
Maneuver +6, EVA +7, Brawling +5, Z-G
Combat +7, Melee Weapon (a pipe, tool or
whatever else they can grab) +4

OUTFIT: Standard dock uniform over light
vac suit (1SP).

COMMENTS: Like to fight but will retreat if
threatened with firearms.

TOBY SCANNELLI

ROLE: OTV PILOT

INT 6, REF 9, TECH 6, COOL 7,
ATT 5, LUCK 5, MA 2,(8), BODY
7, (overweight), EMP 7.CYBERWARE: Interface plugs (Head jacks
and leg stump jacks), detachable cyber-
legs (usually stowed on Crystal Palace).SKILLS: Brotherhood +6, Z-G Maneuver
+10, Z-G Combat +8, Astrogation +9, EVA
+5, Awareness +2, German +1, Spanish
+2, Pistol +2, Athletics +3, Brawling +2,
OTV Pilot +8, Basic Tech +2, Human Per-
ception +3, Persuasion (tall tales) +2.

OUTFIT: Pilot suit.

PERSONALITY: Motivation:, friendly com-
petition; Competence: good (very good
under pressure); Aggressiveness: dynamic;
Glitches: talkative (prone to exaggera-
tion), daredevil, somewhat righteous.COMMENTS: Born in '73, Toby is an old-
ster within pilot circles. At eighteen, he
signed up with the US Air Force, and was
soon jackin' jumpjets over the jungles of El
SalvadorToby became an excellent flyboy, one of
the best. He got along well with everyone,
loved to talk (especially about himself),
loved to fly (dangerously, so he could talk
about it later), and was much sought after
as a mission partner. Then he got tagged
by a surface-to-air missile over Panama and
lost both of his legs above the knee.After the war, Toby applied for a position
as a LEO pilot, figuring zero gee was the
one place he wouldn't need legs. After
"truck driving" for three years, the former
jock is itching for a change.Toby is a genuinely honest and slightly
demented individual. He will always have
a story to tell and will also be curious about
the groups background. He knows the
Bleroit (of course, he calls it the *Louie*) like
the back of his hand and can fly it by feel.
Probably too talkative for most groups, he
can be entertainingly annoying if played
properly. ("This is kinda like that time I wasover Matagalpa, trying to refuel from a
tanker when we picked up six, that's right
six SAMs comin' straight up our afterburn-
ers. Well, I tell ya....").**PHILLIP PARKER**

ROLE: TECH (Pilot)

INT 7, REF 7, TECH 8, COOL 5,
ATT 4, LUCK 4, MA 7, EMP 6.

CYBERWARE: Interface plugs

SKILLS: Brotherhood +4, Z-G Maneuver
+6, Z-G Combat +3, Astrogation +10, EVA
+6, Awareness +3, German +1, Pistol +1
Athletics +4, Brawling +5, OTV Pilot +2,
Spaceplane Pilot +4, Basic Tech +5, Hu-
man Perception +2.OUTFIT: Pilot suit, tool belt w/tools (one of
the wrenches makes a good weapon,
WA=0).PERSONALITY: A serious burn-out, Parker
only does what he has to in order to get by.
Pay him off with a credit voucher and he
will remain silent. It's all business as usual
for him. He will not go along with the party
and must be subdued or threatened if not
bought.

BREAKIN'
IN

On the way over the group has the chance to examine the plans for the Bauer station and to plan their assault in detail. Let them see the Bauer Station Map (pgs. 83-85) and get familiar with the layout. The Referee should review the description of the station below and give the team the appropriate details (but not everything!). Note that they do *not* see the true layout of Module #6. Depending on what the netrunner got, they may have access to personnel lists and defense info as well.

The basic plan as given to the group is to again break into Alpha and Beta Teams to perform different mission functions. After docking, the fake crew personnel will move onto the station and, under the pretense of changing filters, link the Nachtjäger gas into the oxygen system. The PCs will need sealed pilot suits to ensure their protection. After the Bauer personnel are unconscious, Alpha team will find the nearest system port and plug in to pull all research files possible, especially those called project *Gegenbauer*.

BetaTeam should move out and search the station, collecting samples of experiments and destroying what cannot be carried, neutralizing security along the way. After 15 minutes Beta and Alpha will rendezvous. Both board the OTV and head back to the Palace with the booty.

The players may wish to modify this plan, but both the collection and computer goals must be maintained. Allow them to tinker as much as they like. Keep in mind, the more complex the plan, the more



things can go wrong with it. Players who create elaborate contrivances could have the mission go even farther astray than expected.

One basic fact should jump out at them: this station is not rotating, so there is no gravity. The documentation indicates that ongoing gene-splicing cultures must be maintained in this null gee environment to stay properly combined. Thus station personnel must periodically be shuttled to platforms with gravity to maintain muscle tone and bone strength. This also means the assault will be a Z-G maneuver, against people who are used to living in it.

Another little item which they will only know if they got the defense file: this place has a 10 megawatt carbon-dioxide laser mounted on it. Ostensively for communication, it has been "up-upgraded" as an anti-missile device. Its stored power is only good for about 3 shots, but it could carve a nasty hole in the *Louie* if given a chance. Deactivating this baby should be high pri-

ority for the team. The gunnery control is in Module B at the Security console.

The approach to the target goes without incident if Toby is flying, otherwise it may require some DIFFICULT Pilot Rolls. The Palace handles most traffic and the flight path is in the ship's brain, but Toby's mods to the ship make it a little tricky.

When approximately 20 kilometers from the station, the OTV is contacted by the watch officer on the lab. Standard ID procedures work with an AVERAGE Persuasion Roll. The Tech is not paranoid (this is a scheduled run), but he is talkative. He introduces himself as Roj and starts quizzing the player in broken English for any interesting news or gossip. The player must make an AVERAGE Fast Talk roll to come up with some interesting items (maybe about a break-in at the ESA complex...). If the roll is failed or the player shuts off communications, let the Tech ask for a double-check on IDs. They should still pass, but indulge the player's paranoia. There is that big laser, after all...

Docking with the station is a AVERAGE Piloting task even with computer help. A dull thud signals the docking collar locking onto your ship. Air hisses through vents as pressure equalizes and the hatch latches are thrown. A heavy chemical stench will assault the groups as it enters. The masquerade begins.

THE STATION

Take another look at the Biotechniche Map. The station consists of two central modules each with three outer modules attached. The station is designed for null gee, with special equipment and fixtures for convenience in this environment. There is a "floor" which has velcro strips which allow the crew an orientation if they wish it. The chairs are really saddles with straps to keep people from drifting and the beds are sleeping bags velcro'd on the wall. Tables are velcro-topped to hold clipboards, etc.

Double pressure doors (SDP 30) separate all modules isolate the security area (8). These doors are normally open unless isolation of a module is desired. The station is

also laced with cameras all linked to the security console. The walls have an SP of 30 and any powerful weapon used indiscriminately could breach the hull. Use the decompression rules and do not be merciful.

The team enters through the main airlock (1) in Module A. There is another port here which serves as the dock for the station's work buggy: a small, one-man, EVA unit. The suit up room is next (2) which contains racks of vac suits and a staging area. The life support maintenance console is in section (3), where the gas will be applied. Beyond is the radial access corridor (4) which has hatches to Modules 1, 2, & 3. A kitchen/recreation room (5) ends Module A with a hatch leading to Module B in the far wall.

Module B begins with an open exercise room/gym (6) with isometric machines and various monkey bars. Another radial access corridor (7) is here, but this one has pressure doors which can deny entry to the section. These are controlled by the security section beyond (8). Here are the monitor boards and controls for the cameras and doors. Also the laser targeting functions. A guard will always be on duty here. If the netrunner does his job, this board can be overridden. The engineering monitors and communications (9) are past security. Here are the main technical monitors for the station. Beyond is a corridor leading to the solar power panel motors & links and the secondary airlock (10). Enterprising techs can have fun messing with things here, but the party should remember not to break the nice, shiny toys. They are only visiting.

The administration and computer section make up Module 1. Marie Barnard, the station director (see profile, pg. 70), has an office (11) inboard on the pod, with the main computer room (12) just down the hallway. This is where the netrunner wants to end up, and it is a fairly impressive place.

The EBM 4150 is a slick system with a SOA-3100F interface and multiple micro-memory; these Bauer folks know their hardware. Ms. Barnard will probably be in one of these two rooms as well. A small meeting room (13) and Ms. Barnard's quarters (14) complete the section. She has a 9mm plas-

tic pistol in her room which she may try to reach. One of the male Techs is passed out in her sleep sack.

Modules 2 & 3 are the crew's quarters and are basically identical. Small, slightly cramped cubicles line the walls and serve as sleep and privacy rooms. A small bathroom is at the front of each module. The smell of incense comes from # 2 and posters and personal items soften the otherwise all-too-functional feeling. Not that the party will have time to notice. Half the techs will be in these pods during most periods.

Module 4 is the storeroom of the station. The front room (19) is dry goods and spare parts, while the back room (20) is refrigerated for perishable goods. Pretty dull stuff except that in the refrigerator, stored in special cabinets, are some biosamples which, if broken, would mean quarantine and decontamination of the station, not to mention the lingering death of any unprotected bystanders. There is a 20% chance these nasty bugs will be hit by any gun fired in this room. Check your suit.

Module 5 has the main labs and are the reason the station is here. The main work space (15) is inboard with the high risk lab at the end of the module. Various high-tech lab equipment occupy this area along with several computer outlets (16): a veritable mad scientist's dream. The high-risk lab can be sealed by a pressure door and contains an electron microscope (17) and a remote manipulator room (18) for handling isotopes. One bio-tech will usually be here, but he will not fight since this area has a lot of hazardous experimental biomaterial which would constitute a major plague if released. The tech will try to tell the PCs this if anyone will listen.

If a firefight breaks out here, there is a 30% chance of the blasting causing contamination which will cause the module to seal itself off. The netrunner would have to override to get them out (assuming everyone's willing to risk infecting the station). If Ms. Barnard is with the team she may try to trap them in here. (Note: the player's plans

show #6 as being basically identical to this one).

Module #6 *actually* contains special growth wombs (21) for an ongoing experiment: six grotesque vats containing tube-fed artificial uteruses. Beyond is an observation room (22) which looks on a small living area partitioned by a plexiglas wall (23). One of the final products is kept here. The room is generally red-lit unless the inhabitant is under observation. The plexiglass wall opens and is not locked.

Two teammates should play their assumed roles as OTV jocks to get to the air supply. They will be greeted at the main lock by a security man and the tech on duty. Use the generic station personnel supplied (pg. 70). They will be friendly and talkative— it's been a long tour of duty, they haven't seen anyone in a while, and the newcomers are supposed to be okay, right? An EASY Fast Talk should get the imposters where they need to be. The main line access is located in first core module at point 3. Linking the gas into the system is an EASY Basic Tech Roll, but their escort should be distracted during the attempt ("Say, d'ya see that new holo-porn with the nymph and the jaguar?").

The Nachtjäger gas is colorless and odorless, and as it spreads into the station, each unprotected crewmember must make a VERY DIFFICULT BODY Roll or pass out for 6D10+10 minutes. One item not on any file is about to screw things up. Due to the really noxious chemical smell that leaks from the labs into the rest of the compartments during normal operations, many of the crew wear nose filters for comfort. Those with filters only need make a AVERAGE roll to maintain consciousness.

Looks like some of these folks won't go nite-nite.

The assault should now begin in earnest. The imposters must link with Beta Team. The only problem is that some of the lab folks *aren't* asleep. Instead of a nice, peaceful raid, the teams are being faced with a real fight with people who know the station better than they do and who are expe-

rienced in Z-G. No one said life was fair. Let's hope nobody got to the radio....

About the only bright spot is that the computer center (12) is unguarded and close to the airlock. Alpha Team should be able to make it there intact. Just yank out the snoring sysop splayed in the saddle and jack in. Plugging into the system is simple, but the design is unusual and may take a little getting used to (One level higher on all tasks for the first 2 rounds). Check the Bauer Net Map on pg. 87 for the layout. Again, the Ref should populate it based on the 'runner's ability. It is a small, fairly basic set-up, but it should have a couple of good defense programs. Also, there is a *Liche* tied into the *Gegenbauer* file. They really don't want you to read that file...

The first priority will be the security controls (section 2) which also house the laser programming. While in the Net the netrunner may notice the laser programming on an AVERAGE Awareness roll. At the same time he can take control of all security systems (aside from the programming of Module 6). This allows him to lock or unlock hatches, but not open them. Station personnel can override the locks manually, so trapping them this way won't work. He may encounter a Tech wired in from the lab (30 % chance). The *Gegenbauer* file is in a very secure annex (section 3) and will take some time to find (3 minutes). If the netrunner takes time to read it, he had better have some Bioscience skill because it is incredibly technical. If the players are able to understand it (V.DIFFICULT General Knowledge), tell them what is in Module 6.

Beta Team's job has become a nightmare as they fight their way through the labs, finding what they can, and dealing with frightened techs and armed security. Smoke grenades, shotguns, loose drifting debris, and panicked screams are the window dressing of this section. Lethal force is the order of the day. Refer to the station maps to choreograph the action. Remember: the guards are experienced in Z-G and will use it to their advantage, popping out at all angles and scaring the hell out of the team.

The number of conscious security personnel should be tailored to the capabilities of the party. Don't overwhelm them right off.

Oh yeah, has Tova lost it yet?

They may come across Marie Barnard masquerading as a tech in Module 1. She will ask to be protected by the team, while attempting to mislead them. She will definitely warn them off Module 6, yelling something about bio-contamination. She may make a useful, if dangerous, hostage.

They will find only minor items until they reach Module 6. Then the real fun starts.

The hatch to Module 6 has a manually keyed lock on the outside. The netrunner can't unlock it, so the team will have to crack it themselves, perhaps under fire. A DIFFICULT Basic Tech roll can get them in, but they have to do it while slugs whiz by.

Once open, they will probably dive in for cover. They don't see anyone in the dimness. Most of the station is standard prefabricated modules, but the instant the team enters here, they will notice it's unusual.

First, it has dim red lighting, while the rest of the labs are lit by fluorescent white tubes. As the players drift along, they will see glass vats and humming machinery surrounding them in the half darkness. Anyone using a flashlight will see what seem to be artificial organs floating in growth tanks. There are six individual tanks. One in the back glows with an internal light, bathing the room with shifting, watery shadows. It's occupied.

Whatever is in it, it is definitely alive. A 40cm inverted pear shape, it floats gently as the golden, amniotic fluid bubbles past, pulsing red tubes running back and forth around it like a plastic spiderweb. The backlight reveals translucent flesh and blood vessels pumping just under the surface. Inside this organ is a dark, all-too-familiar shape, bobbing slowly with the mechanical life-support heartbeat...

You can almost make out the large eyes

closed in slumber. The eight month-old fetus seems healthy except...there are too many hands. The feet, which should end in small pudgy toes, instead have long tapering fingers. These feet belong to an arboreal monkey, not a human.

About this time (about 1 minute after the first character enters the module), The hatch to the module slides shut and a warning beacon sounds. Any character right at the hatch may make a VERY DIFFICULT Athletics roll to jump out of the module before it closes. A taped female voice announces:

"ALERT! ALERT! MODULE SECURITY SEALS COMPROMISED! JETTISON AND AUTO-DESTRUCT SEQUENCE ACTIVATED!"

A sudden bump shakes the module and the team feels a slight burst of acceleration.

Looks like they're going for a ride.

The module is set to jettison if unauthorized personnel enter. The station crew all have hidden ID badges that the module's security scanner recognizes. The team is not so equipped. The computer has decided that the module is in jeopardy and has set the module destruct sequence in motion.

The netrunner can detect this activity and have the OTV's pilot contact the team in the module. The self-destruct panel is along the right side of the module, near the growth vats (AVERAGE Awareness roll to spot), and if an override code is keyed in within two minutes the destruct can be cancelled. The netrunner, if he isn't too busy, could find the override code in the matrix with a DIFFICULT Awareness roll. He can then relay it to his trapped teammates. Or the team may have enough Basic Tech to trace the destruct circuits and deactivate it manually (DIFFICULT).

Either way, this sequence should be played fast and intense. The soft female voice counts down in the background as the team scrambles about the compartment by flashlight and IR trying to find the destruct controls. The netrunner calling in

the override as the team tries to key it in while the module starts to tumble...

This could, of course, be the end of the mission for Beta Team unless everyone cooperates, so emphasize teamwork and fast-thinking. They may yet survive. Let them roll a few times if they blow it and you can always have the self-destruct fail (it has never been tested, after all). If everything goes wrong, the Referee can let the module blow, but the mission will basically end here. All that is left is mopping up (sorry about the pun). More drama can be drawn from allowing them to save themselves... barely.

If they survive this encounter, the PCs will discover two more items in the module to rattle their nerves...Read the following aloud, but *only* if they shut down the alarm system. Otherwise, it's not gonna matter much, right?:

You've shut it down! Instantly, the fluorescent lights come on. Combat reflexes make you spin and aim in the same motion. A human silhouette is outlined for an instant before you realise that it is naked and staring. A boy, about four years old, greets you with a wide-eyed gaze: the kind best reserved for lost puppies. He drifts in the air behind a plexiglass partition. A small, spartan living space is illuminated beyond.

"Ich heiße Erik. Wo sind Sie alles? Was wollen sie hier?" he says in a child's voice. His legs are shorter than they should be and each ends in a fully functional hand.

"Bozsha Moi," gasps Tova.

It should be obvious at this point that Bauer Biotechnische Werkstatt is creating humans designed for life in zero gravity. Using preimplantation techniques to alter the egg, they are growing a pilot crop of Z-G laborers. Needless to say, **THIS KIND OF EXPERIMENT IS HIGHLY ILLEGAL AND INCREDIABLY IMMORAL**, even in this tarnished era. This is in direct violation of the Osaka Accords of '04 where any prenatal human gene alterations of this type

were declared criminal. Dornier-Bauer is in deep kimchi if this gets out.

Erik is the first product of the Dornier-Bauer experiments. He was decanted about six years ago and raised as the prototype to test the adaptability of the breed. His cubicle has filtered air (which is why he is still conscious), but is not air-tight and will decompress if the module is breached. The characters *should* notice this, but Tova will point it out (strongly) if no one does.

The players will also discover one more item. A partially dissected fetus lies in a medical cabinet (they're treated like lab animals). It's not pretty. Possibly a blow oats roll is called for (and in a suit too!).

The PCs may want to call in the OTV at this point. Toby (or the player pilot) can disengage from the lab and swing round to pick up the rogue module. Grappling with the slightly tumbling cylinder is a VERY DIFFICULT Piloting task (even for Toby). Give them two or three tries before the next stroke of bad luck. Read this if Toby pilots:

You watch as the spinning cylinder comes into view through the port. Toby's face illuminated only by the instrument lights, is totally absorbed in the 'face, guiding the ship to rendezvous. The smell of sweat and adrenalin mix in the reprocessed air. The hiss of attitude jets bleeds through the hull as slight adjustments are made, and the module seems to stop moving.

"Attitude and vector locked," Toby whispers, "Take me in, Louie."

Mechanical arms appear at the edge of the viewport frame and extend clawed hands in greeting. The module waits patiently for the steel embrace. As the claws lock down a slight lurch shudders through the bridge.

Toby takes the time to say, "Don't worry. Just damping any off-line motion. Our mass 'll absorb it." Then he is back in the 'face, eyes glazed.

A slight pop sounds from the cargo

deck and suddenly the starfield is spinning madly. Heat, and the sharp smell of burning plastic sizzles up from behind you.

Toby screams "We've been scragged, goddammit! Hull breach in cargo area. Losing pressure and it's giving us bad delta vee! Somebody get back there and see how bad it is!"

Just this far from a clean getaway...

Ahem. Did the team destroy the Laser? If not, one of the security people has gotten to it and drawn a bead on the OTV. If the teams killed everyone on board then the auto-defense program is now firing the laser. Either way, the *Louie* is hit and losing atmosphere.

As the team gets to the cargo area they will see a small whirlwind ripping up the lower compartment as air rushes out a 30 cm hole in one side. Emergency patches are in a kit on the wall. A DIFFICULT Z-G Maneuver roll will get the patches and two more successive rolls by the same character will get a patch in place. This slows the air leak but does not stop it.

The damage is done. The hole in the OTV is too large to repair (about three feet), and the emergency patch is not perfect. If the OTV does not rendezvous with a station within four hours, all atmosphere will be lost. Suit air will not support the crew for more than two hours beyond that.

Rendezvousing with a shuttle as originally planned is now out of the question. The module is too valuable to lose and there is not enough time to wait. The lab module will not fit into a shuttle anyway, and Tova will not accept abandoning the children in orbit.

The value of this find is hard to calculate, but the players should soon realize that this is worth a lot more than the original mission goals. It is time to call for help. The only options are to call in the ESA, Interpol, or their mysterious patron. Clouet will not be able to help them unless they have evidence of a conspiracy in the raid. If the

Okay, a laser ought to wipe *Louie* all over the cosmos.

But it's primarily a low powered commo laser, and not that effective.

The point is that you want to keep the heat on the players, instead of just blowing them away (you'll get your chance later). Remember—dramatic effect is the best part of roleplaying.

Oh, and by the way. If they did scrag the laser or the laser program, not to worry.

Hit 'em with a meteor.

It happens all the time in Science Fiction!



netrunner made copies of the Bauer files, they may have something, but they are still guilty of assault and a dozen other crimes. The team will face full criminal charges for all their acts on this mission, unless they produce some hard evidence.

Know any good lawyers?

The team might consider calling in another corporation. Certainly Biotechnica (see the original *Cyberpunk* game) might be interested in their find and they do have a station in orbit. Arrangements can be made by radio, but both Interpol and their patron will be dogging the team the whole way. A guided missile may be their patron's answer to betrayal.

If they make it to the Biotechnica station (doubtful since their air supply is insufficient), full scale corporate war may break out. It will be short, since neither rival has Biotechnica's resources, but the team will probably be among the first casualties. We leave this option open to development by the Referee. Corporate war is not something to be taken lightly.

Tova is not ready to cut and run on her patrons, however, and will protest this option. She has already reached a decision.

"I am about to contact our employers." The words come from Tova in short, clipped bursts. "The situation has changed too drastically to maintain the original plan."

"Relay this message to the No-Ahme - Caldwell offices on Crystal Palace: Project Mirrorstar requests emergency dock at port offices for perishable product. Have hired OA tug *Louis Bleroit* for delivery. Please respond with vector. End message.

"We should be able to make it there. The only question is: will they take us in or turn us over?"

No-Ahme Caldwell: The name of the new hot-shot genengineering corp. The corporate game has spilled into orbit with you as pawns. You can only hope

that what you have is valuable enough for your side to come pull you out. The cold stars outside don't hold much sympathy.

If the team wants to contest this decision, they let 'em. They had best have some serious alternatives, though. They can all hear the air hissing away...

MARIE BARNARD

On Site Project Director

ROLE: CORPORATE

INT 9, TECH 8, REF 5, COOL 7,
LUCK 4, ATT 7, EMP 3, MA 5,
BODY 5

CYBERWARE: Plugs, cyberaudio w/radio splice, cyberoptic w/micro-telescopic & image enhancement, memoryware (chipped Zero Gee Combat +2).

SKILLS: Resources +6, Z-G Maneuver +5, Pistol +2, Athletics +2, Awareness +3, Specific Knowledge (Bioscience/Genetics) +6, Fast Talk +3, Intimidate +2, Wardrobe and Style +4.

PERSONALITY: Motivation: personal advancement, Competence: Very Competent, Aggressiveness: fairly aggressive, Glitches: cold, ambitious, cunning, brilliant.

OUTFIT: Jumpsuit, hideout pistol (9mm), snapcove (see *Hardwired*) vial, and nose filters.

COMMENTS: This is one *nasty* lady. Talented in biosciences, she has used past assignments to gain a strong position in the Bauer heirarchy. She's the design genius behind Erik. Marie will use all her talents to protect her project— including pretending to be a tech and feigning helplessness to sabotage the assault. Play her sharp and the group will never know what hit them. If the netrunner got personnel files on the station, the group will recognize her and avoid deception.

She takes pride in Erik, inasmuch as he is her crowning achievement. She does not see him as a son, but as a well crafted product.

She will sacrifice Erik if it will save the project. She was trying to jettison #6 when the team came upon her in module #1.

ERIK

Product 145-6, Gegenbauer Project

ROLE: PRODUCT

INT 6, TECH 5, REF 9, COOL 4,
LUCK 7, ATT 8 (too cute), EMP 8,
MA10, BODY 4,

SKILLS: Z-G Maneuver +10, Athletics +4,
Awareness +2, Basic Tech +1.

CYBERWARE: Biomonitor.

PERSONALITY: Motivation: curiosity,
Competence: untested but naturally gifted
in this environment; Aggressiveness: moderate
(he's too curious to back off); Glitches:
painfully naive and trusting, ignorant of
his own uniqueness and importance, trusts
Bauer personnel.

OUTFIT: Well, he does have a holographic
postcard of the Eiffel Tower to which he is
very attached...

COMMENTS: Erik is the proverbial lost
puppy. He really is a decent child, courteous
and aware, but, while he has been relatively
well-treated by the station personnel, he has
had little real affection. His room is not
locked, but he has been conditioned not to
leave it without permission (we won't go into
how). He has explored the station, but is
unaware of the outside (Earth, etc.). He is
therefore ravenous for knowledge and is
bound to get into trouble if allowed out. He
cannot survive in any sort of real gravity, and
may have little immunity to disease. Also,
he speaks only German. Tova will instantly
take a protective attitude towards him. Woe
betide any who suggest abandoning the boy.

Milk him for all the pathos you can get.

BAUER TECHS (3)

ROLE: TECH

INT 8, REF 5, COOL 4, TECH 8,
LUCK 6, ATT 5, MA 5, BODY 6,
EMP 2.

CYBERWARE: Interface Plugs, plus, roll 1D6:
1-2 cyberoptic, 3-4 cyberaudio, 5-6 nothing.

PERSONALITY: Loyal, bored, talkative.

SKILLS: Scrounge +3, Specific Knowledge
(Bioscience/Genetics)+1, Z-G Maneuver+2,
Basic Tech +4, Computer Tech +2, Awareness
+2, EVA +4.

OUTFIT: Jumpsuit, tools. Two will have
nose filters.

BAUER SECURITY OPS (5)

ROLE: SOLO

INT 6, REF 7 (8), COOL 7, TECH 3,
LUCK 5, ATT 4, MA 6, BODY 8,
EMP 3.

SKILLS: Combat Sense +2, Z-G Combat
+4, Pistol +4, Athletics +2, Awareness +2,
Basic Tech +3, Stealth +3, Specific Knowledge
(Bioscience/Genetics) +2, EVA +4.

CYBERWEAR: Plugs, boosted reflexes, cy-
beroptics w/infra-red & targeting, reflex
booster, biomonitor. One guard has a Slice
N' Dice in his right thumb.

PERSONALITY: Loyal, Bored, Competent,
Mildly Sadistic.

OUTFIT: Pilot suit w/ helmets within reach,
armored vest (SP 12), fletcherette pistol
(smart-chipped), combat knife, comlinks.
All have nose filters but may not be wearing
them (50%).

COMMENTS: These guards also work as
techs and lab personnel. It is too costly to
have five security specialists on one station.
The Ref should use as many as he needs.



BAUER BIO TECHS (4)

ROLE: TECH

INT 8, REF 5, COOL 4, TECH 6,
LUCK 5, ATT 4, MA 6, BODY 5,
EMP 4.

SKILLS: Scrounge+4, Z-G Maneuver +1,
Awareness +1, Z-G Combat +1, Specific
Knowledge (Bioscience/Genetics) +5,
Computer Tech +2, Basic Tech +2.

CYBERWARE: Plugs, cyberaudio w/radio
splice.

PERSONALITY: Cynical, preoccupied, de-
tached, easily intimidated.

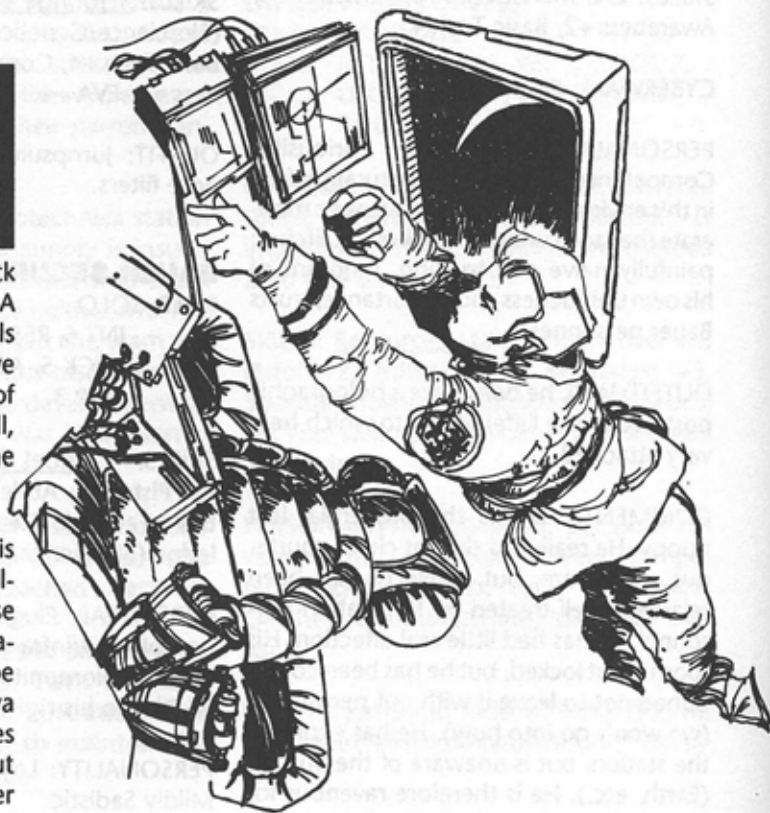
OUTFIT: Jumpsuit, examination instru-
ments. Two will have nose filters.

TURNIN' 'ROUND

Play the voyage back
simple and tense. A
couple of Piloting rolls
and a Fast Talk roll give
the players a feeling of
risk; the worse the roll,
the more unpleasant the
trip.

The closest safe place is
obviously the Crystal Pal-
ace—nothing else is close
enough. The main fea-
ture of the journey can be
getting to know Erik; Tova
can translate and she does
want to find out about
him. He can only answer
simple questions (he is
more intelligent than the average 5 year
old, but come on...). Still, he is really en-
dearing with his Z-G antics and inquiries.
Scenes like Erik zero-gee juggling between
his hands (all four of them) or innocently
examining a pistol ("Vas ist?" he says with
big eyes) may seriously push the players'
saccharin tolerances. Skip these scenes if
sympathy is not in your party's vocabu-
lary.

The trip back is a claustrophobe's night-
mare, but the Palace finally heaves into
sight. Just in time too, since the guys in
the *Louie* are on suit air by then. The



guys in the lab module aren't much bet-
ter off. Somehow, No-Ahme Caldwell
has gotten you clearance to dock at
their module in the orbital transfer
complex. No Interpol; no ESA police;
things seem almost too calm. Now you
have turned over the captured module
and its contents to No-Ahme Caldwell,
and are awaiting further instructions.

Sure wish they'd let you get into gravity,
but they choose to talk to you up in the
NAC dock offices. The storeroom cum
conference hall is stark and smells odd,
like a hospital gone sour. When the door

opens, hopes rise that your wait is over. But the two men who enter, with their tailored suits and mirror fingernails, are obviously hungry young corporates. The red tape is just getting started.

The team is being debriefed by two corps, Hikaru Shoten and Tomas McIntyre. Both seem pleasant, but condescending. They want a full report from everyone about the mission. It is up to the Referee how much detail you want in this segment. The interviews can happen one at a time or all together. Or you can just skim over this section and ask if the players tell the truth to the corps or not. The characters do get the chance to ask some questions, but the only answers they get will be these:

1. The team will be returned to Earth ASAP under whatever IDs are necessary. Payment will be made in full to the team with hazard pay.
2. The child and fetuses will be examined, but not harmed. They will remain in company care. No, it is best if you do not see them (Tova would ask).
3. Dornier-Bauer has not reported the raid and doesn't dare as long as No-Ahme Caldwell has the children. Their research is far more incriminating than any corporate raid.
4. No criminal charges are pending due to "considerable expenses" covered by NAC.

After the debriefing, the team is moved to a small break room by NAC security and told to wait for transfer. Floating in webbing and drinking orange juice from bulbs, the team has time to discuss the situation.

About ten minutes into the conversation, someone may notice that Tova is extremely distracted. If anybody asks her what is going on, she will motion them to silence and hand them a small earpiece. She is wearing an identical piece herself. If the team continues to question her she will hand them this note:

"WE ARE BEING MONITORED. I'M DOING SOME EAVESDROPPING ALSO. STAY COOL."

Tova has dropped a short range bug in the debriefing room to monitor the corps after the team leaves; a Standard Operating Procedure for a paranoid solo. It's a small unit with a short range, but it can avoid most detection. She has an extra earpiece for the PC's, who will find themselves listening to a conversation between Shoten and McIntyre.

MCINTYRE: "...a marvelous opportunity here. The potential of these constructs is amazing if properly handled. We'd be fools not to go for it."

SHOTEN: "Agreed, but this is not a politically auspicious time to reveal them. You know how the Russians would react to this project, and they can throw a good deal of power against an offender. Much work remains to be done and we have only five samples to dissect and examine. We cannot afford the luxury of keeping them alive as Bauer did. It was their fatal mistake. Fortunately, it has played into our hands."

MCINTYRE: "We could learn a lot from the full-grown one though. It seems a shame to waste it."

SHOTEN: "It would be too hard to conceal in this environment. Bauer found that out the hard way. I do not propose to follow their example. The time for these *Hoshi No Kodomo* is not now. Besides, the Company has the *Gegenbauer* file now. That is enough."

MCINTYRE: "Well, that doesn't leave us much choice about the *ronin*, does it? What do you think: a shuttle accident with no survivors, or wait 'til they get dirtside and ice them? Perhaps a tragic exposure to an experimental virus will require their quarantine until we can find a counteragent... if ever."

SHOTEN: "I leave the specifics to you. You have a knack for such things. I will see that the *kodomo* are transferred from the module to a suitable area. We will create our own when the time is right, and we can use the information to

cripple our opponent. This *dokusen* will not escape us."

Some serious eye-opening should be happening here. No one really trusts the corporations, but to hear one you are working for issue your death warrant is another matter. The group will probably want to plan an escape, but will have to do it by writing notes as the room is bugged (Tova tells them this). Have the players write everything out and make them stick to it. Biotechnica may be looking more attractive about now (not that they would have treated the team or the children any differently).

Tova is adamant about escaping and getting help for the children. She will go alone if the party is too timid. The group has probably changed into their street clothes by now (including any armor) and have been issued temporary NAC ID badges. They have their knives, although the guns were taken from them by security. If Toby accompanied them on the mission, he is there as well. They should keep this in mind if they plan to go into gravity (Toby's legs are not with him).

They can try a break themselves if they have the guts. There are three guards around the corridor with orders to detain the party. Time for some slick moves and Fast Talking (VERY DIFFICULT roll to convince the guards to let them pass). Of course, they may just want to get close to use their knives... If they make it past the guards, they'd better hustle because there will be someone after them awfully quick. Four guards with orders to kill will pursue the party right up to the core elevators. They will try to nail the group without witnesses, but in the docking complex a lot can be covered up.

Good luck, guys.

If the players don't feel up to trying a break on their own, or if you just want to make things more exciting, give them some empty time to plan and get anxious. They are about to get some unexpected help.

The dull whump of an explosion sounds

outside and the room is bathed in red emergency lights. Screams and the bark of gunfire complete the aura of confusion. A glance out the door shows a vista of smoke and violence. Dark figures in commando suits duel at the corridor junction with security personnel. Silenced submachineguns scythe through the guards and the raiders fly past the intersection, deeper up the module. The body of the door guard drifts past, orbited by spheres of his own blood.

Dornier-Bauer isn't giving up yet.

In case the players haven't figured it out, this is a raid to retrieve or destroy the space children. The team had better take this opportunity to make a break for it. They can scavenge weapons off the bodies of the guards: there are three within reach, each with a fletchette pistol and two clips. One has a backup 9mm plastic pistol with 10-round clip. This gives the players a fighting chance.

What they *don't* know is that the commandos are carrying a tailored nerve virus to release in the NAC docking complex. It is hoped that this will either kill the children (and all witnesses), or cause a quarantine which will slow NAC down. The players could make a DIFFICULT Awareness roll to notice that the raiders are wearing filter masks and sealed suits. The commandos are supposed to release the plague on the dock itself, but if the raid goes awry, they will leave it anywhere in the dock complex. The plague has a lifespan of 12 hours, is not contagious, but will require that anyone exposed make a DIFFICULT BODY roll or die within 3D10+5 minutes. This takes the form of abdominal cramps, swollen eyes, fever, loss of muscle control (spasms), heart seizures and coma.

Death usually does follow that sort of thing.

The way for the team isn't clear. The monitors in the area still work and NAC security is responding with reinforcements. The team could try gunning through the squad of guards now gliding up the central tubeway, but a better tactic would be to

bluff their way past. There's a lot of misinformation running around and the team does have ID tags. An AVERAGE Fast Talk roll should get them past, but have them roleplay it out. The guards will be confused and anxious to find out what's happening. Helping Security with information can go a long way towards getting out. Don't let the roll determine everything.

If the group insists on combat, it'll be vicious. The NAC guards take no prisoners. If you want to make things even more distracting, have the remaining commandos come scrambling back up the other end of the tube, retreating from the security ahead of them (the raid has obviously failed). This kind of cross-fire can be very deadly. The team will also see one of the commandos pull out a small container marked BIOHAZARD. A quick retreat off this level by any means is the healthiest alternative.

Surprisingly, Tova does not go off the deep end in this fight. She seems much more intent on getting out and bringing back help. She will try to slip past the guards and out to the central tubeway. Anybody with any brains will follow her example. DIFFICULT rolls at Stealth and Z-G maneuver are required.

Assuming the team makes to the next couple of levels without getting infected, they are now adrift in a docking complex no-man's land. If they plan to hang around and await the authorities, Tova tells them they will be a long time waiting. No doubt NAC and Bauer have done their best to keep things quiet, and, unless things spill into the station, ESA will not intervene.

Every other dock security guard will know something is going on, and be very wary of strangers. Treading lightly and moving quickly past the two checkpoints between them and the core is what Tova suggests. A good combination of Fast Talk, Intimidation, and Eurodollars (if they kept the credit card) ought to get them by.

Hope Otana isn't on shift. Hint, hint.

HIKARU SHOTEN

NAC EXEC

ROLE: CORP

INT 7, REF 6, TECH 4, COOL 5,
ATT 6, LUCK 2, MA 6, BODY 5,
EMP 4.

SKILLS: Resources +7, Z-G Maneuver +6, Martial Arts +1, Athletics +1, Awareness +1, Corporate Policy +5, English +4, Interview +3, Interrogate +1, Wardrobe & Style +2, Space Survival +5.

CYBERWEAR: Cyberaudio w/recorder, Wearman, skinwatch, Biomonitor.

PERSONALITY: Motivation: dedication to company (NAC); Competence: fairly competent but doesn't like pressure; Aggressiveness: not very; Glitches: loyal, does not like taking chances, not overly imaginative.

OUTFIT: Immaculate suit, comlink.

COMMENTS: An above average corporate flunky. He is dedicated to the *Kaisha* (company) and will not see it compromised. He is quick-witted but does not like to live on the edge. He will always treat the players like honorable but lower caste workers.

TOMAS MCINTYRE

NAC EXEC

ROLE: CORPORATE

INT 6, REF 5, TECH 4, COOL 8,
ATT 6, LUCK 6, MA 5, BODY 7,
EMP 5.

SKILLS: Resources +5, Z-G Maneuver +5, Martial Arts +1, Pistol +2, Athletics +2, Awareness +1, Corporate Policy +3, Interview +2, Interrogation +3, Streetwise +2, Space Survival +3.

CYBERWARE: Plugs, cyberoptic w/ image enhance, biomonitor, skinwatch.

PERSONALITY: Motivation: personal ambition; Competence: competent; Aggressiveness: very aggressive; Glitches: enjoys games, prone to recklessness.

OUTFIT: Suit, recorder, 9mm mini-pistol.



COMMENTS: Tomas is a serious adrenalin addict. If it isn't chancy, he isn't interested. Still, he works well with Hikaru and will listen to his advice. They will both declare the party expendable at the drop of a hat.

NAC SECURITY

ROLE: SOLO

INT 5, REF 6 (8 chipped), COOL 6, TECH 2, LUCK 4, ATT 4, MA 5, BODY 7, EMP 3.

SKILLS: Combat Sense +4, Z-G Maneuver +5, Z-G Combat +3, EVA +4, Space Survival +3, Martial Arts +3, Pistol +3, Athletics +2, Awareness +1, Intimidate +1.

CYBERWARE: Cyberoptic w/targeting, biomonitor, boosted reflexes.

PERSONALITY: Loyal, uninformed, competent.

OUTFIT: Uniform, Armor vest (SP 10), Fletchette Pistol, Comlink.

BAUER COMMANDO

ROLE: SOLO

INT 6, REF 7 (9 chipped), COOL 7, TECH 5, LUCK 4, ATT 5, MA 8, BODY 6, EMP 2.

SKILLS: Combat Sense +4, Z-G Maneuver +5, Z-G Combat +3, EVA +4, Martial Arts +3, Pistol +3, Awareness +2, Stealth +4.

CYBERWARE: Cyberoptics w/IR & targeting, Boosted Reflexes.

PERSONALITY: Professional, competent, desperate.

OUTFIT: Sealed NBC sneak suit w/filters, IR goggles, Armored vest (SP 10), Smart-Chipped Uzi, Smoke Grenades, Combat knife.

REACHIN' OUT

REF Notes: If the characters escape they can find refuge in a park where they can consider options. If the characters cannot agree on a plan, Tova will suggest approaching the Soviet Consulate for asylum. She will start to head out on her own if the party continues to dither.

Either way, at about this time a small team of crack solos from the patron corp will attempt a hit on the party. If the party can hold out for two minutes, ESA security will arrive accompanied by Interpol. The hit team is driven off or killed, and the party is now forced to confront Interpol. If the party

realizes that Interpol can help, they must convince the agent of their story and the need to hurry to prevent the corp from destroying the children. Otherwise, they



can attempt to break away (difficult at best), and find other help. The Soviets are the best choice for authoritative action (such as declaring Russian citizenship for the children).

After making their way through the last checkpoint and about 300m. of passage-way, Tova abruptly stops by grabbing a retaining ring projecting from the wall, then holds out her arm to stop everyone behind her.

Around the next corner is the dock area guardpost and the normal procedure for re-entry into the Crystal Palace proper is a full body scan. This would normally make it somewhat difficult to get by with the "tools" the party acquired along the way, but hey, that's what NPCs are for, right?

Tova reaches into a pocket in her boot and pulls out what looks like a peppercorn. She pinches it between her fingers, then hurls it into an air vent across the guardroom from where you are. Then, while watching her timepiece, Tova turns and says "Get ready to move quickly. There's going to be a bit of noise in three seconds...two... one..."

WHOOMPH!!!!

The party sees a small cloud of black smoke pouring out of the vent. While guards rush the vent to see what's happening, Tova beckons the party to follow her. As long as everyone can make an AVERAGE roll vs. Stealth, you won't need the guard stats.

If one of the PCs blows his/her roll, the guards will still only be able to get off one shot each before the party reaches the lift (AVERAGE roll v.s. Athletics). Any character not making it into the lift can be told "game, over man"—they will be arrested and turned over to Interpol. They might meet up with the party later so don't let them leave the room quite yet.

At various stops along the ride down the core lift the PCs will be joined by eight to ten other people whose curiosity will be piqued by a bunch of heavily breathing strangers. Expect useful comments like

"Hey, man, what's the rush?— Batman IX doesn't start till tonight." If one of the party is wounded, the rest of the passengers will mind their own business. Wouldn't you?

As the lift reaches the transfer point to the torus, the party finds no resistance. Tova moves swiftly to the shaft elevator. The passengers that travelled with them diplomatically wait for the next elevator down.

If the party was sighted leaving the docking area, they may want to do some quick thinking. There will surely be guards posted at the bottom of the shaft. But since there is no way of stopping the lift before it reaches the bottom (except with specialized tools and skills which our party does not have), the characters will have to deal with the situation somehow.

If they want to fight it out at the bottom of the lift, assume there is a 25% chance that four NAC are guards waiting there (see pg. 76 for stats). Oh boy.

If the party hasn't handled the guards within ten turns, enough reinforcements will show up to wipe the entire party out (not that it matters, cause once the party has drawn blood, NAC won't bother to take prisoners). So go ahead and have fun with whatever firepower you want; just don't blow up the Palace. End of adventure.

Let's go on the assumption that the party made it "down-torus" safely and unseen (the guards were busy in another part of the torus).

As they break out into the open, Tova leads the PCs towards the small scale mockup of the original Crystal Palace that was seen on the tour. Read this:

The Palace replica consists of a central dome three stories high with two L shaped extensions on either side. All entrances are on the front of the building; one on each end of the L's and one in the central dome. The walls are comprised entirely of 9in (20cm) squares of crystal, (yes, that's right, *real* crystal) and it appears impossible to see inside

due to the condensation on the panes.

This is, of course, a tourist attraction so there are a number of people milling around and going in and out of the place.

Tova suggests that this would be a good place to decide their next step. She leads them to one of the side entrances, stepping over a barrier placed there (so much for civil respect, huh?).

As the last two characters are entering the building, allow them an Awareness roll vs. AVERAGE. There are two pairs of officious looking people (Interpol) who appear to be in search mode.

Noting an open-air tram moving towards the Palace model, the PCs may (vs. DIF-FUCULT) also notice four figures in jackets far too heavy for the climate controlled torus. This is the No-Amhe Caldwell team.

Upon entering, you find the air filled with the fragrance of plantlife and the humidity almost unbearable. Plants fill the room from floor to ceiling, growing from beds of soil two feet deep and hanging from ladders that reach up to the roof. Needless to say, its very difficult to make out the opposite end of the room.

The plantlife ranges from lace-like fungi growing from decaying logs to climbing vines with leaves a meter across. In fact, if it weren't for the dozen or so people milling about, you might think you'd stepped into a tropical rain-forest. But you don't have much time to look. Tova's pushing her way through the crowd. Stopping at the other end of the room, she motions to an area behind one of the planters where gardening supplies are stored. Once everyone is gathered she says, (rather snappishly),

"So, what do you folks think of life in LEO. Having fun yet? Well, if you ever want to walk on rock again we had better figure out a way off the Palace before Dornier-Bauer decides to turn us into popsicles. Any suggestions?"

Tova will wait to see what the party might come up with. You can let them deliberate (sweat) for a short while, maybe a minute or two. Then Tova will say,

"Listen, I know a couple of people at the Soviet Consulate that might be willing to help us out, but the problem is making it there... its two toroids away and something tells me it won't be a safe stroll."

Sadly, the characters won't have any time to make a decision because just then, the No-Amhe Caldwell team walks into the room (from the door leading to the central dome), spotting the party.

If a lookout was posted by the party, they will not be surprised. Otherwise, the NAC team gets one free shot at a random PC. The NAC goons will be a -4 on this shot, for not only is the team back behind a planter of vines, but there is also a group of five flamboyantly dressed Chromers standing right in front of them. Except for the one made up as a slave on a chain, the Chromers all look like the 20th century band KISS. Nice touch.

Two of the NAC team will stay at the door they entered from while the other two will circle around to the other door to cut off both escape routes.

Allow the firefight to continue for six to eight turns, depending on the attrition rate of either side. If the party manages to somehow wax the entire NAC team and make it to an exit, they have another surprise coming. Interpol has arrived on the scene *en force*, (pardon' moi francais) with Inspector Clouet at the front of a team of a dozen Interpol agents.

In looking around, the party will probably notice that there are also a few more at good vantage points (EASY roll vs Awareness). Those of the NAC team who were not taken out during the firefight will surrender to Interpol.

There are two ways this next conversation might go. If our party had a previous run in with the Inspector after the ESA raid,

then Clouet may start off with something like this...

"Hello, my friends. I hope you did not think that I would let you leave without saying goodbye. Now, it seems to me that we had a arrangement; however, it appears that you have been a little pre-occupied so I can understand your delaying our rendezvous a short while. But here am I and here are you...sooo... shall we go sit and discuss how you have been spending your time at the Palace?...Hmmm...?"

If, however, the party has not seen the Inspector since the tour, then he'll say...

"Tsk,tsk tsk, my friends. Something told me we would meet again, but did you have to make so much noise? You could have simply called me and I would have come to see you. Really, and such a mess too! You must tell me how you have been spending your vacation, but first I have a couple of sights to show you myself. Please, follow me."

The Inspector leads you to a nearby office and post a perimeter guard. "To keep our discussion private," he says. Taking you to a small room with a single door, he posts two Interpol agents outside. Once inside he says...

"I think now you should tell me everything you know, and maybe, just maybe, I will be able to help you out of this out're situation. Let's start with you." He will then point to a random player character.

In explaining the story, it is critical to get Andre to understand that time is of the essence, for if anything happens to the children (such as what No-Ahme Caldwell has in mind for them) then they will be of little use as a bargaining chip for the party.

There are only two ways that the children might be saved. The first would be a lightning raid against the No-Ahme Caldwell docks and hope that the children aren't dusted before the party can reach them.

Second, the party could try political channels for aid in the hopes that public attention might keep NAC from committing murder.

Talking to Andre, the party will get another rude surprise (as if there haven't been enough for one day). The Dornier corporation has agreed to release all information they have (not much) on the Bauer experiments, pleading that it had no knowledge of these experiments. Interpol has been told that all local data (meaning from the workshack) was wiped by the Bauer group and that the only hard evidence is in the hands of No-Ahme Caldwell. Without hard evidence, Interpol cannot act against NAC. So, saving the children is in the hands of the party (a nasty moral dilemma).

THE RAID OPTION

With everything that has happened since the party escaped from the docks (the trip to the Palace replica, the firefight, the apprehension of the party and the subsequent explanation to Andre), the preparation time needed for a raid would be 1.5 hours. Add to this the time required to get the strike force back up to the docks and in position and we're talking two hours that the No-Ahme Caldwell corps have had to work out their own plans.

When the party reaches the NAC docks, a dock crew in yellow bio-contam suits has hosed down the area with disinfectant (to stop the Bauer bio-attack). Also on the dock are four armed NAC guards (see pg.76), armed with shotguns and flechette pistols. Once the firefight starts, the party will have ten rounds to get to the docking platform and reach the module before it is jettisoned and destroyed by a waiting No-Ahme Caldwell OTV. If the module (and the evidence) is destroyed, you know where that will leave our characters...

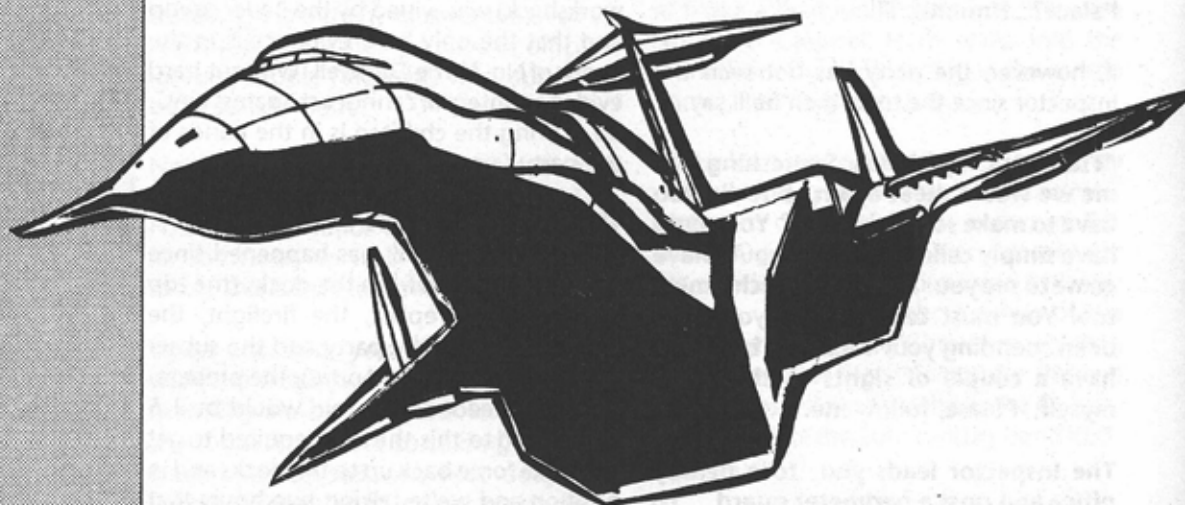
THE POLITICAL OPTION

The best direction for the other option is to go to the Soviets, as Tova suggested earlier. This is definitely the safest and easiest of the two options, but try to let the players decide which route to take. Andre will follow the decision of the party believing that they have the best grasp of the

situation and as far as Tova is concerned, she will stay out of planning as much as possible while she works out plans for an escape.

Once the Soviets are alerted to the situation, they will immediately grant the children Soviet citizenship and woe to any orbital corporation that gets on their bad side.

If the party decides on the raid, Tova will break away successfully as soon as they leave the building and head straight for the Soviet Consulate. There she will relate the situation and the following will be achieved just as though the party had decided to go to the Consulate themselves.



NAC HIT TEAM

ROLE: SOLO

INT 6, REF 6 (8 chipped), COOL 6, TECH 2, LUCK 4, ATT 4, MA 5, BODY 7, EMP 3.

SKILLS: Combat Sense +6, Z-G Maneuver +6, Z-G Combat +5, EVA +5, Space Survival +3, Martial Arts +5, Pistol +6, Athletics +5, Awareness +1, Intimidate +1.

CYBERWARE: Cyberoptic w/targeting, biomonitor, boosted reflexes.

PERSONALITY: Loyal, uninformed, competent.

OUTFIT: Overcoats, armor vest (SP 10), fletcherette pistol, comlink.

INTERPOL AGENT

ROLE: COP

INT 7, REF 9 (11 chipped), COOL 7, TECH 2, LUCK 4, ATT 4, MA 5, BODY 7, EMP 3.

SKILLS: Authority +6, Z-G Maneuver +6, Z-G Combat +5, EVA +5, Space Survival +3, Martial Arts +5, Pistol +8, Athletics +5, Awareness +1, Intimidate +5.

CYBERWARE: Cyberoptic w/targeting, biomonitor, boosted reflexes.

PERSONALITY: Very competent. Incredibly loyal (to Inspector Clouet).

OUTFIT: Tailored suits, armor vest (SP 12), fletcherette pistol, comlink, taser.

COMMENTS: Relax. These guys are the Law. They're on your side...aren't they?

WRAPPIN'
UP

Domier has decided to make a clean sweep of things, going public with the Bauer Biotechnische debacle. They have turned over all files and records of the experiments to Interpol and are offering full cooperation in the investigation. Bauer Biotechnische has been thrown to the wolves.

No-Ahme Caldwell stock has plummeted. And while no criminal charges are pending, Interpol has taken an intense interest in NAC activities (sort of like being audited by the Kremlin). Biotechnica is buying a lot of NAC stock. While NAC will be occupied for a time, the party will realize that they have made an ambitious and aggressive enemy. Maybe it's time to get that face job they've been thinking about.

If the characters cooperate with Clouet, then he will agree to keep their records clean as far as their actions on the Palace are concerned. However, he also stipulates that if the characters so much as walk on the grass while in his jurisdiction, the files he is holding will be reinstated and the characters will be prosecuted to the fullest extent of EEC law.

Of course, if you really wanted to be nasty, Interpol or the Soviets could press some charges just to get the team out of circulation. If the netrunner made a copy of the *Gegenbauer* file and stashed it away, the group can use it for leverage. Neither the Soviets or Interpol want the source of the children revealed. Let's talk deals...



When the party is finally shipped dirtside (at Interpol's expense), they find that the half payment in escrow has been wiped from their accounts and they are right back where they started. Except that now, No-Ahme Caldwell wants to make lampshades out of their skins.

They may be surprised to find that they have made some allies as well. If they ever stumble into Soviet territory, their aid in the "space child" incident will earn them some slack. Of course, only a few higher-ups know about it, but it could count when they need it. The Russians love their children too...

Andre Clouet will continue to keep an eye on the party and may turn up at opportune or awkward times, depending on the Ref's whim. It may be noted that Inspector Clouet will soon be Inspector General Clouet and he does not forget his friends.

Finally, if the characters did not cooperate or if things blow up in their faces, then they will find themselves hand tilling fields in a remote (we're talkin' reeeeemote) Siberian farming colony. For a long, long time. They are peaceful and productive. They don't talk much or remember little things... like their names.

TECH NOTES

MILITECH "BLACK WIDOW" FLECHETTE PISTOL

P • +1 • J • P • Caseless Fletchette (see below) 10 • 2 • ST (Range 30 m)

The "Widow" was designed under contract with the U.S. Air Force as a U.S. Orbital Jump Marine weapon. The idea was to create the potential for a great deal of damage with low penetration/recoil for use in enclosed environments. Ammo feeds from a somewhat bulky 9 round clip. Each round has 10 flechettes with a 1 meter spread at medium range (roll location as if a shotgun). Roll 1D10+2 to determine the number of flechettes which hit. Each does 1D6/2 damage. They may be coated with poison or narcotics to increase their damage.

MITSUBISHI TASER

P • 0 • J • P • Dart + Charge (See Below) 12 • 1 • ST

Tasers fire a small darts which trail fine wires. When the dart strikes, these wires carry an electrical charge which stuns the target into unconsciousness. The darts do 1D6/3 damage total. If they penetrate, the victim must make a VERY DIFFICULT BODY roll or be stunned unconscious for 2D10 minutes. Even a successful save means REF and COOL are halved until the darts are removed (Average REF roll). Tasers have a maximum range of 5 meters. The ammo represents the number of charges in the battery per recharge.

Dornier-Bauer Biotechnische Genetic Engineering Branch of Dornier Aerospace

Main Office: Stuttgart, Germany

Regional Offices: Sao Paulo, Brazil

Stock: None, Subdivision of Dornier.

Troops: 200 combat ready, mostly broken into security units.

Covert Operatives: 10

Equipment and Resources: 4 AV-4 assault vehicles, 2 private jets, 6 Ospreys, 6 personal helicopters, 2 attack helicopters. Each office has full surgical facilities. Office on Crystal Palace and an orbital lab (Dornier-Bauer Biotechnische Werkstatt) for isolated research. State-of-the-art hand weapons and armor for its troops, but few heavy weapons. Dornier-Bauer can draw upon any of the regional offices of its parent company, Dornier, which has resources only slightly less than Orbital Air (which explains how they can maintain a work-shack).

Background: As one of the designers of the later model Hermes spaceplane, Dornier made out quite well as the ESA space program grew. In the interest of diversification, Dornier acquired a small genetics firm and gave it support. Bauer Biotech rapidly expanded, and has made a point of pursuing unorthodox lines of research under the idiosyncratic guidance of the president: Ilsa Schuller. Their work on sickle cell gene repression in infants has caused a considerable stir, but so far they have not really turned a profit for Dornier.

No-Ahme Caldwell Genetic Engineering and Biochemicals

Main Office: Seattle.

Regional Offices: San Jose, Crystal Palace

Stock: 3,472,000 shares.

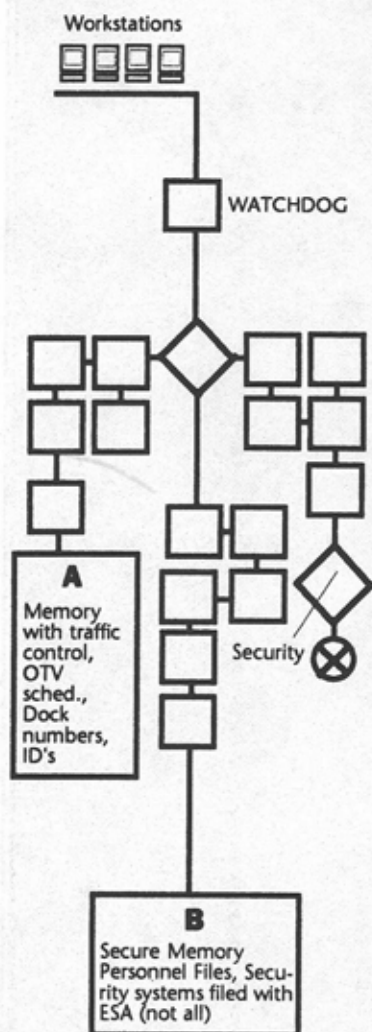
Available on Market: 1, 273,000 shares.

Name and Location of Major Shareholder: Tsuguo Yoshida, Osaka, holding 52.3% of total shares.

Troops: 250 mostly in 10 man assault squads.

Covert Operatives: 25

Equipment and Resources: 6 AV-4s, 6 Apache Helicopters, 4 Osprey VTOLs, 3 private jets, 4 armored cars. No airlift ca-



THE ESA NET

to get whatever they need at the time. NAC has the finest weapons and armor for their troops, but don't have full military stock. They have invested heavily in intelligence operatives and seem to have access to a great deal of cutting-edge gadgetry. Seattle and San Jose offices have full trauma center capability. The office on the Palace is intended for routing pharmaceuticals from other factories in orbit.

Background: The fusion of a Japanese genetics group with an American chemical

firm, NAC has proven very competitive in the growing gene engineering market. First they introduced a mildew-eating bacterium which proved both commercially successful. A full string of unique patents followed, confirming their solid position. The fact that several of the patents have been challenged in court has done little to slow their momentum. In fact, NAC seems to want this market all to itself and is pursuing that end with a unique combination of Japanese shrewdness and American flamboyance. This is a company to watch.

BAUER MODULE KEY (see pg. 84)

Module A

- 1) Main airlock. There is another dock for station's work buggy: a small, one-man, EVA unit.
- 2) Suit up room (contains racks of vac suits and a staging area).
- 3) Life support maintenance console.
- 4) Radial access corridor has hatches to Modules 1, 2, & 3.
- 5) Kitchen/recreation room with a hatch leading to Module B in the far wall.

Module B

- 6) Exercise gym with isometric machines and various monkey bars.
- 7) Radial access corridor.
- 8) Security section: monitor boards and controls for the cameras, doors, and laser targeting functions.
- 9) Engineering monitors and communications
- 10) Solar power panel motors & links and the secondary airlock

Module 1

- The administration and computer section make up Module 1.
- 11) Marie Barnard's office.
 - 12) Main computer room.
 - 13) Small meeting room.
 - 14) Ms. Barnard's quarters.

Modules 5 & 6 (on plans)

- 15) Main work space
- 16) High-risk lab
- 17) Electron microscope
- 18) Remote manipulator room.

Modules 2 & 3

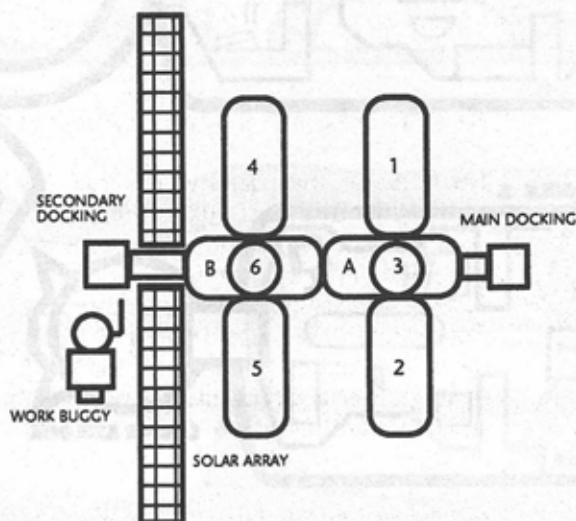
Crew's quarters

Module 4

- 19) Dry goods and spare parts.
- 20) Refrigerated for perishable goods.

Module 6 (real)

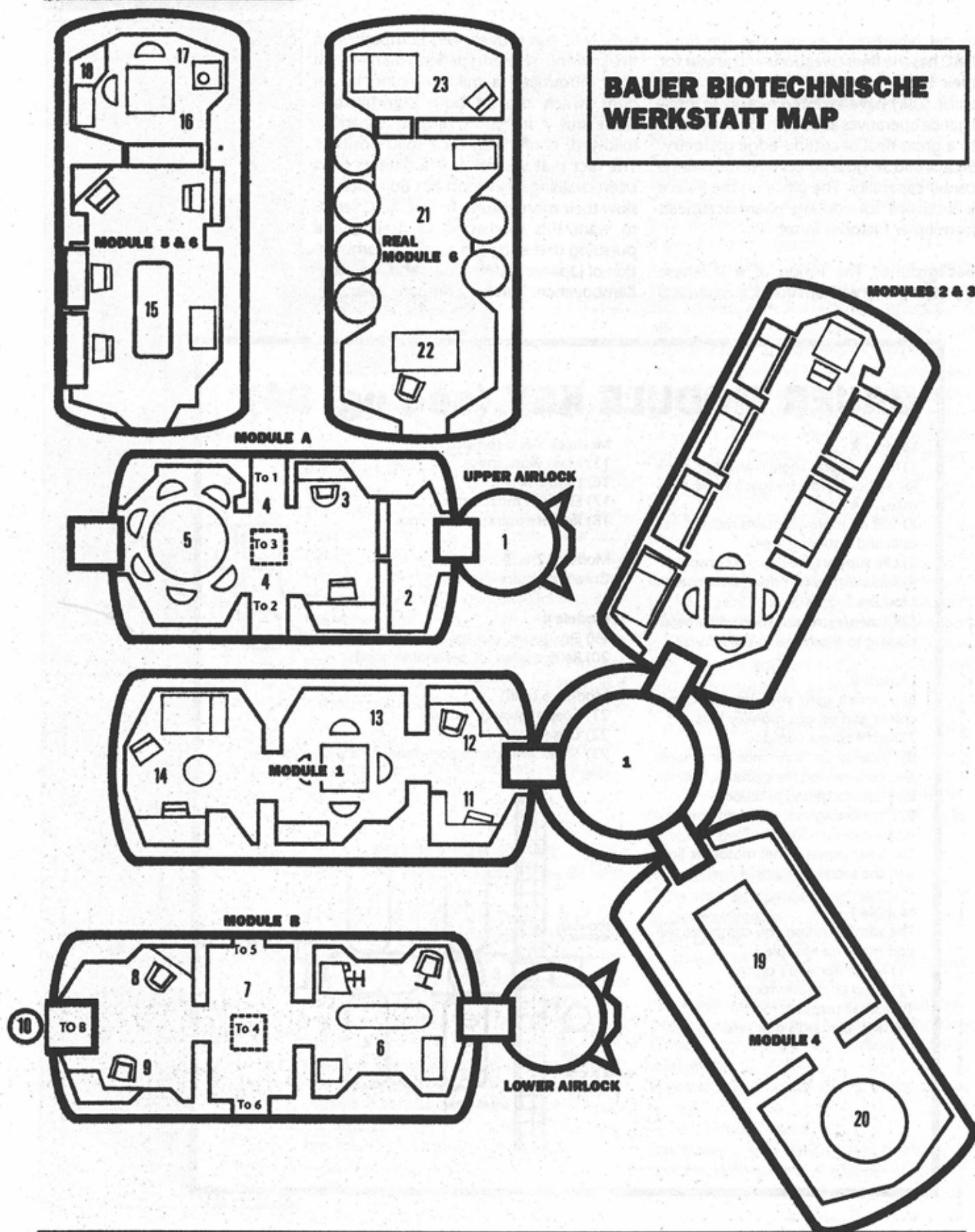
- 21) Special growth wombs
- 22) Observation room
- 23) Small living area partitioned by a plexiglas wall



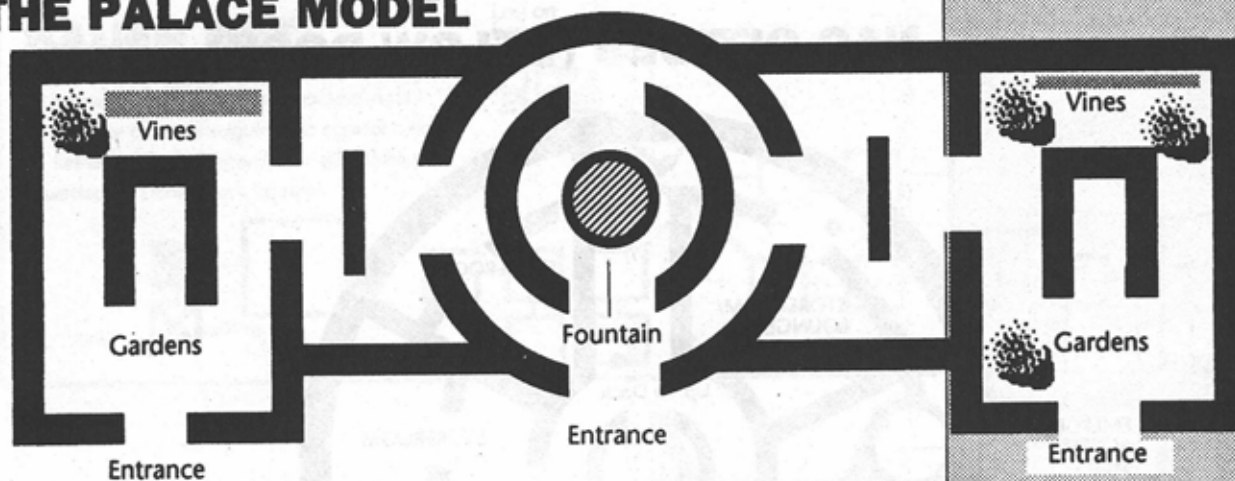
NEAR ORBIT

ADVENTURE MAPS

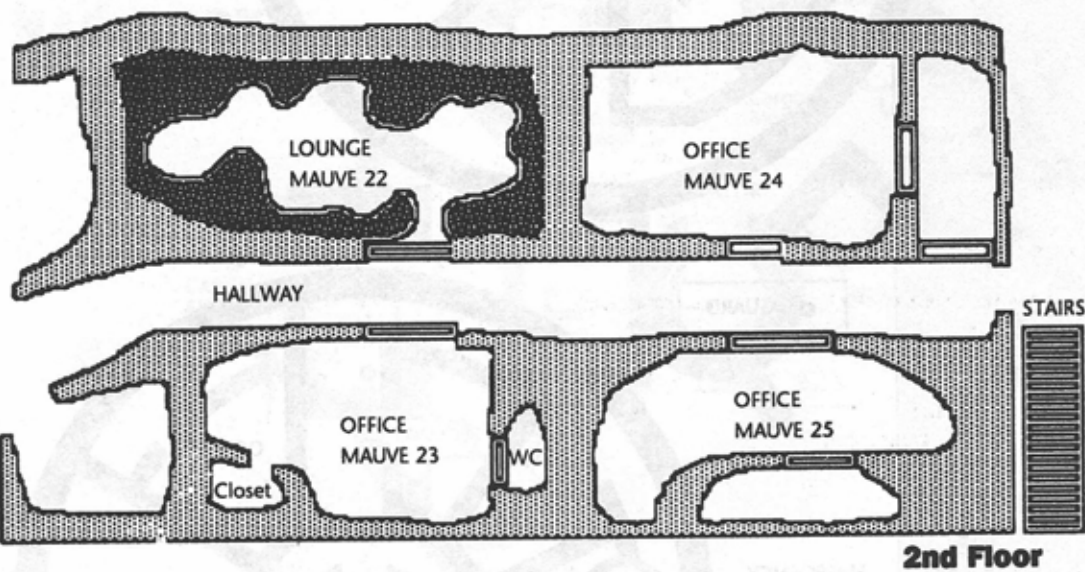
BAUER BIOTECHNISCHE WERKSTATT MAP



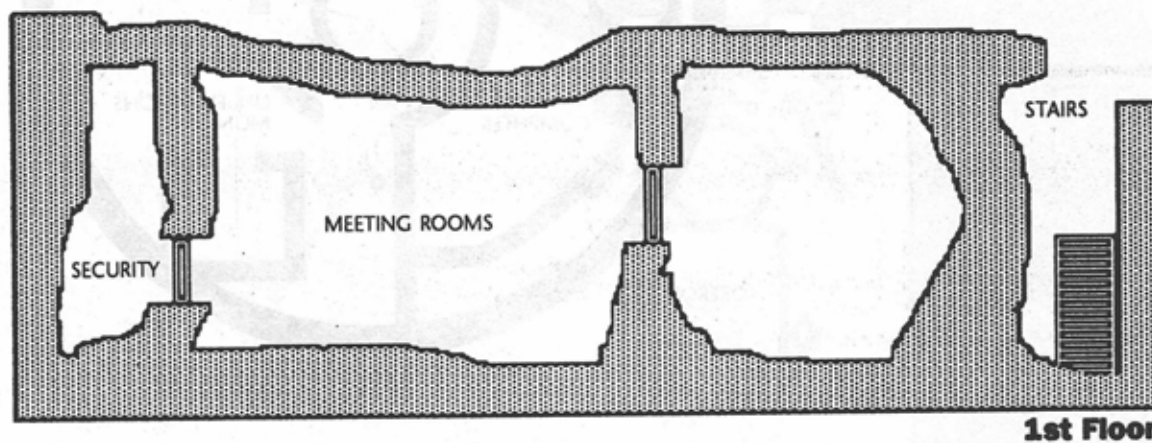
THE PALACE MODEL



ESA OFFICES

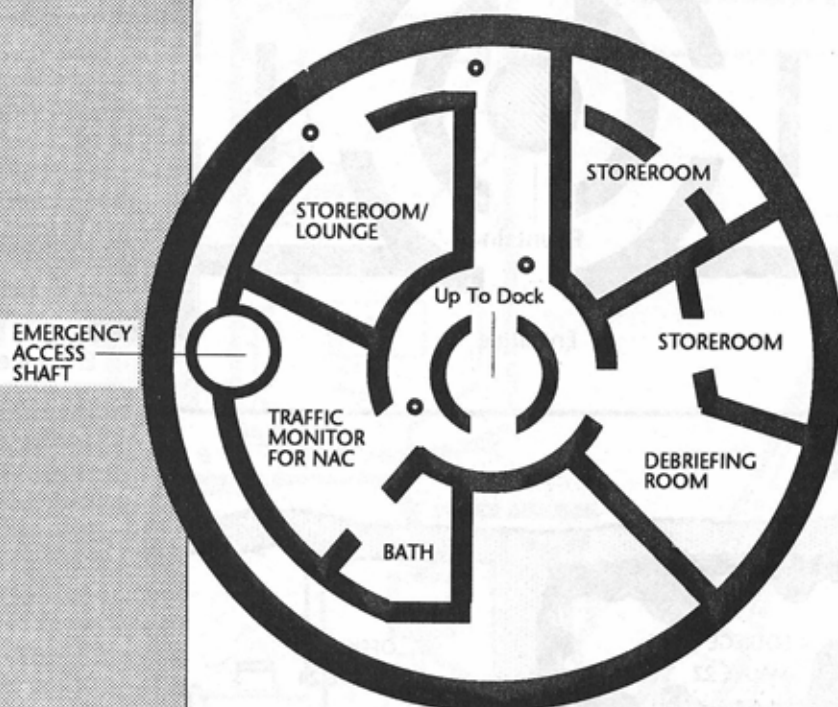


2nd Floor

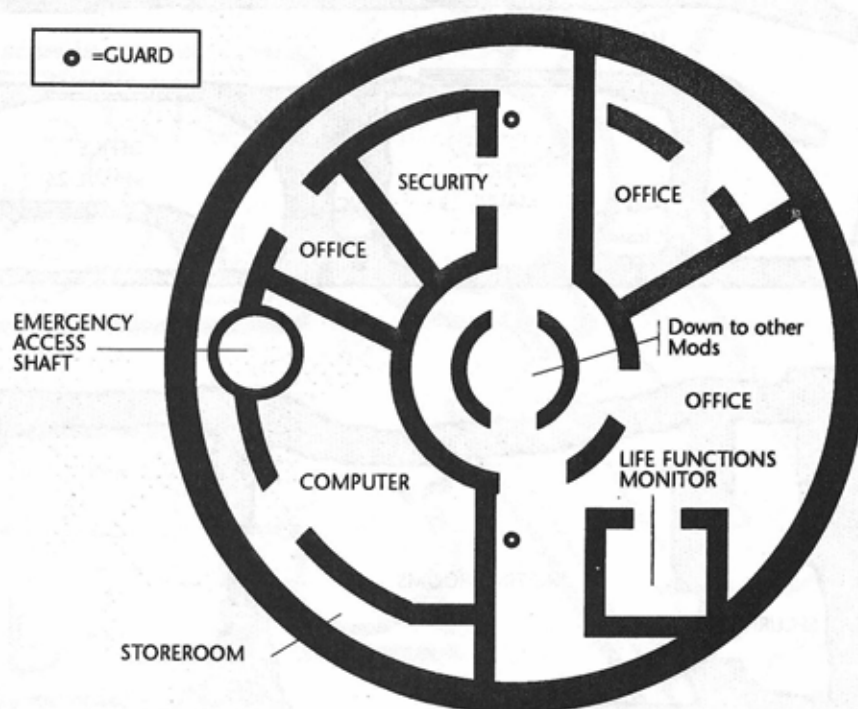


1st Floor

NAC OFFICES (BELOW DOCK)

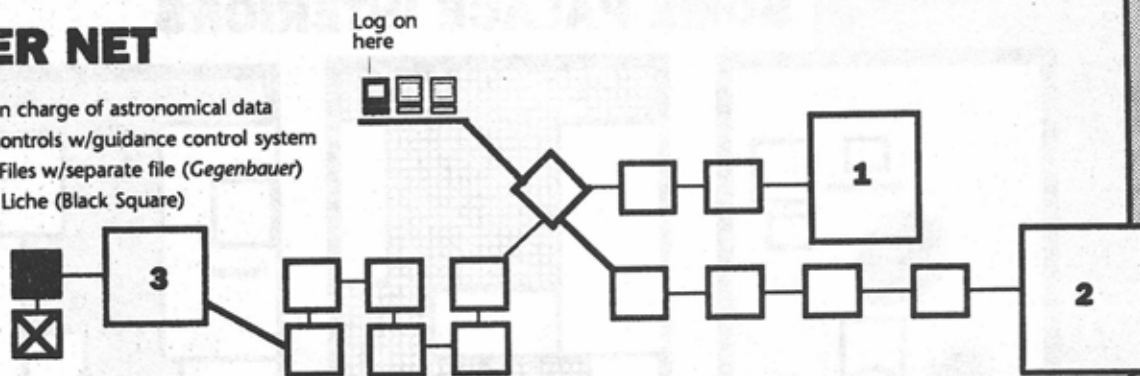
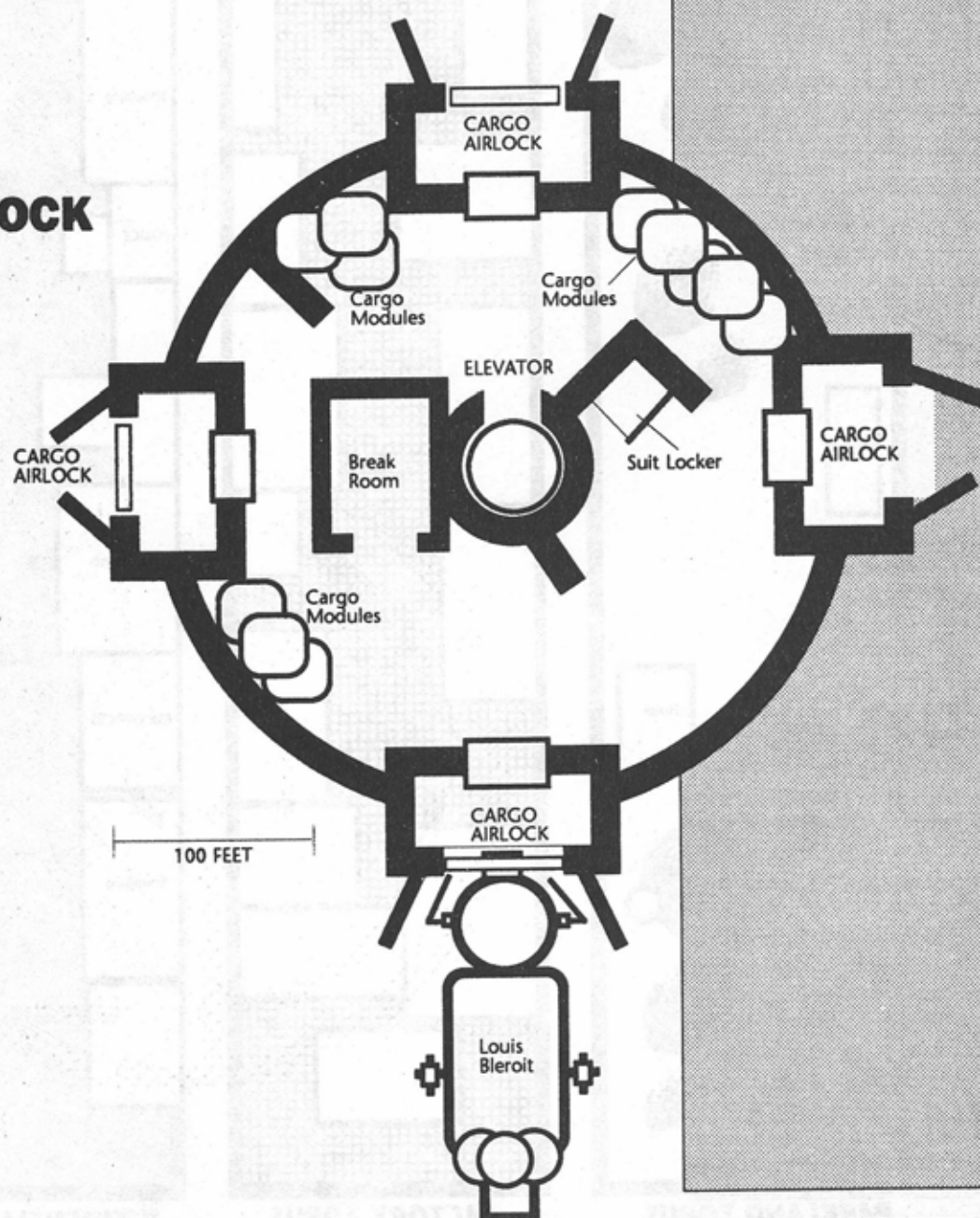


● = GUARD

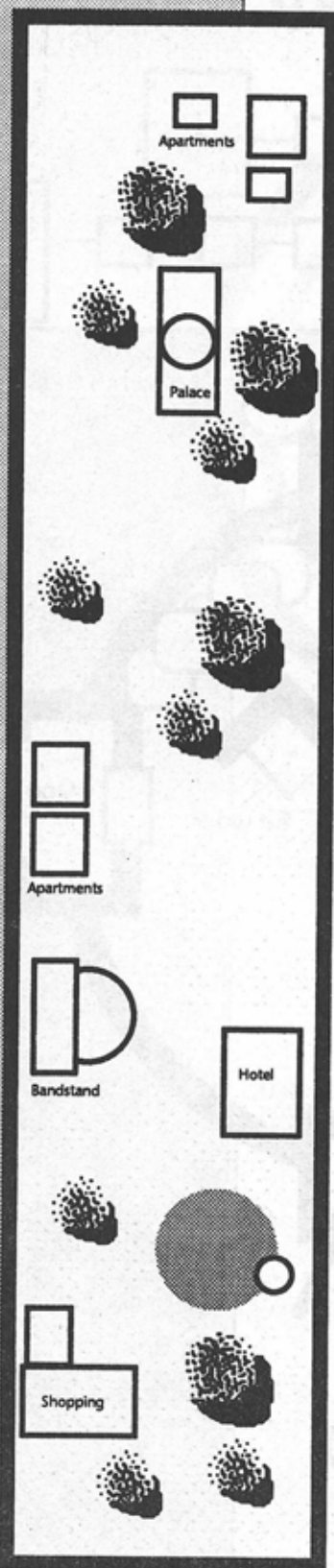


BAUER NET

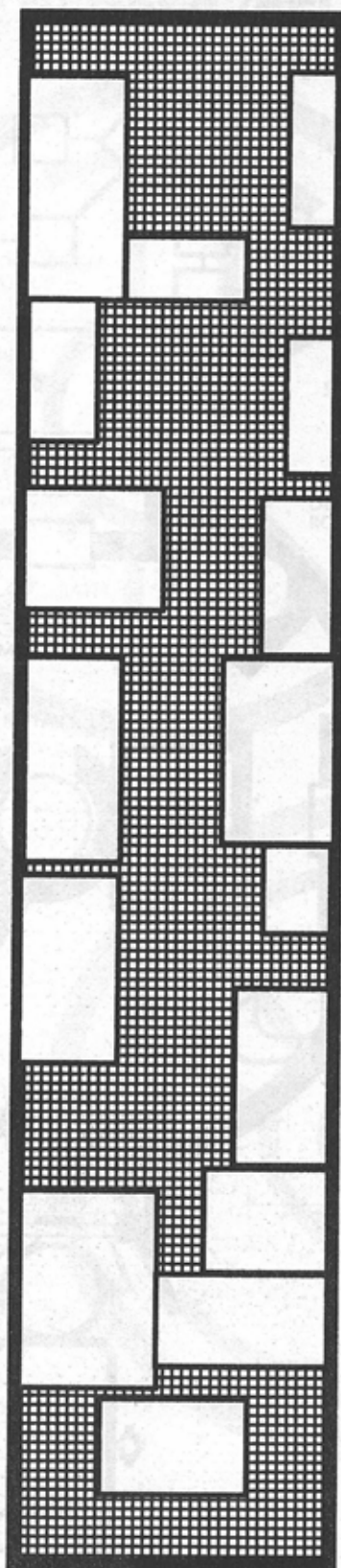
- 1) Memory in charge of astronomical data
 - 2) Security controls w/guidance control system
 - 3) Research Files w/separate file (*Gegenbauer*)
- Guarded by Liche (Black Square)

**NAC DOCK**

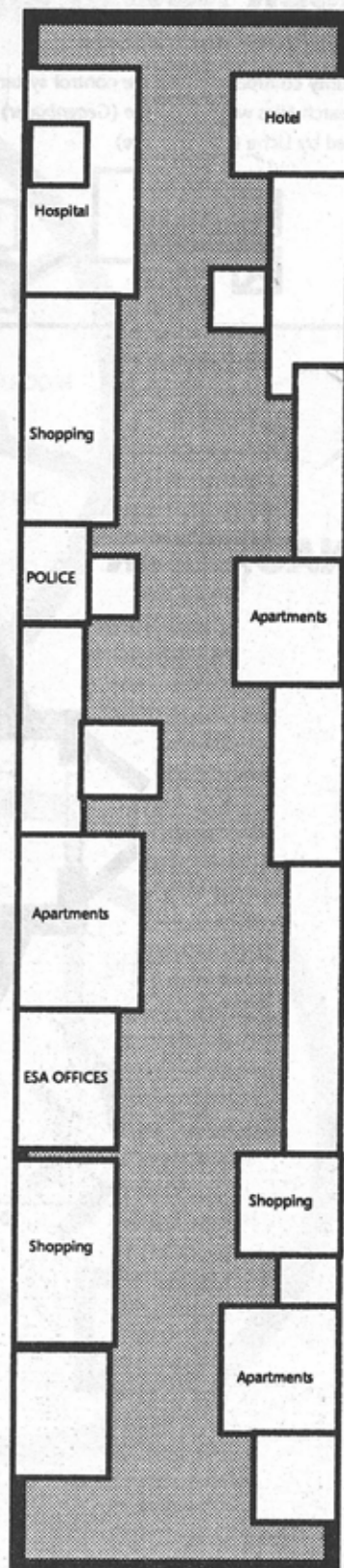
SOME PALACE INTERIORS



PARKLAND TORUS



FACTORY TORUS



RESIDENTIAL TORUS

PONDSMITH • ACKERMAN • WILDEMUTH

ON THE EDGE

It is the most hostile environment of all. It's boundaries are limitless, stretching beyond the sight of the most powerful probes. There is no air; no water. A deadly radioactive hail sleets through it's emptiness. Baked to boiling by the Sun; frozen to absolute zero on it's darkside, it can crack metal, powder plastic and boil oxygen. An unprotected man can exist in it's unforgiving realm for only a few moments, before his lungs burst, his blood boils away to steam, and his body freeze-dries.

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