

DEEP SPACE



THE INTERPLANETARY SUPPLEMENT FOR
CYBERPUNK™ 2020



DEEP SPACE™

The CYBERPUNK® Space Supplement

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**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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On the high frontier it
takes more *than* metal
to make *you* tough...

ON THE EDGE OF SPACE

EARTH: 2025

The corporations control the world from their skyscraper fortresses, while armies of cyborg killers roam the shattered urban ruins. The seas are a chemical soup 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 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 and frigid, it is the world of great spinning cylinder-worlds, speeding space-fighters, spider-like orbital vehicles, and the titanic white lattices of the deep space explorers.

This is the world of DEEP SPACE.

THE VIEW FROM SPACE

Motivated by a deteriorating ecosystem and accelerating population growth, mankind has exploded out into the stars. In 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 spiderweb girders of habitats and stations. There are over two thousand 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 space-fighters 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 first true space colony and the glittering crown of the Euro Space Agency's achievements. Looming just beyond at L-5 is O'Neill One: the titanic micro-planet whose cylindrical bulk spans twenty miles (33km), a giant hive of humanity surrounded by myriad OTV's and shuttles. On the far side of Earth from O'Neill One lies the equally massive O'Neill cylinder of Paradise Station; situated at L-4, this is the final cylinder colony, and is eventually planned to extend to approximately 100km in length. Its design already contains the seeds for this further expansion.

On Luna and Mars are self-sustaining colonies, tunnelled into the floors and walls of their respective craters, with miles of solar collectors providing the raw energy to support life on these dead worlds. The mile long tracks of the Luna massdrivers are buried deep within the crater rock, a dark reminder of the time when ESA used them to hurl multi-tonned rocks at the 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 manoeuvrability.

GEOSYN ORBIT

GEO-Synchronous Orbit (22,000 miles / 37,000 km) is dominated by orbital workstations, 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 (OTV's).

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 points orbit the largest space constructions in existence—the roughly toroidal Crystal Palace space station (L-1), the mammoth O'Neill One Habitat (L-5), Paradise Station (L-4), and the smaller Galileo Cylinder (L-3). Behind the Moon sits the L-2 point, home of the ESA's testbed cylinder and deep space explorer dock.

ON LUNA

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

There are two permanent cities on Luna, both controlled by the Euro Space Agency. Tycho/Luna Colony, the largest, maintains two massdrivers, used to boost Lunar rock and ore out to the L-5 constructions. The population (in 2025) is approximately 18,000. The second colony, at Copernicus, supports a single massdriver, and a population of around 12,000.

TIME-LINE FOR DEEP SPACE

1997

Tycho/Luna colony founded.

2000

Construction of Crystal Palace begun.

2002

Copernicus/Luna colony founded.

2005

First Corporate war. Construction on Crystal Palace delayed as Orbital Air plunges resources into defense of Transworld against EBM. A stalemate results.

2008

Euro-American Conflict runs for only a few weeks before ESA destroys many strategic U.S. offensive positions by hurling Luna rock via the Tycho massdriver.

2009

ESA/Sov Mars mission departs.

2010

O'Neill One construction begins.

2011

Crystal Palace opened. ESA/Sov mission arrives on Mars.

Construction of L-3 and L-4 colonies begins.

2012

First viable nanotechnology achieved concurrently by Euro and Japanese corporate labs.

OUT TO MARS

From 2011, after the landing of the first ESA/Sov joint Mars mission, humanity has maintained a tenuous foothold upon Mars. It was NASA, however, with its ambitious Columbus mission, who established the first permanent colony at Chryse Planitia, with ESA announcing formal completion of their Isidis Base twelve months later.

Since that time NASA has provided a regular series of flights to support the Mars colony. The latest generation of NASA deep-space cyler transports, the Explorer class, are performing the trip in under thirteen months. In conjunction with JAB, the Chryse base has become an important center, currently supporting a population of over 900.

Martian orbital space has become progressively busier over the last three years and now supports its own complement of workshacks and factories for production of materials and components. At least a dozen operating autofactories are known to orbit Mars, with approximately two-thirds of these operated by JAB.

Although all major parties involved on Mars are interested in the possibility of terraforming Mars to reduce the cost of further colonisation, there has been little real progress made in this area. A quasi-independent research organization, known as the Japanese Mars Research Laboratories (JMRL), has constructed a significant research installation at the Martian polar ice-cap. However, the extent of their investigations is unknown.

THE BELT

Tumbling like tarnished jewels, a billion tons of rock and ice spin through

the void between Mars and the giant gaseous Jupiter. Aided by the colonisation of Mars and the prospect of untold mineral wealth a steady stream of robot mining droids, processing factories and foolhardy individuals clutter the solar system's main asteroid belt.

FURTHER OUT

Although mankind now possesses the technology to extend into the outer solar system, the intense cold and inhospitable atmospheric conditions on the outer planets make further commercial expansion unlikely for some time to come. Advanced probes from both NASA and JAB continue to shed new light on the nature of the outer solar system.

Based on data gathered by the 2018 ESA unmanned probe, NASA launched a manned mission to Jupiter in early 2023. The mission is aimed at conducting scientific analysis on both the gas giant and its moons. Curiously, several corporations have taken an unusual degree of interest in the mission and it is believed that NASA may be hiding certain information revealed by the earlier probes. Whatever the information is, it appears to have generated some interest outside of NASA, and rumors speculate that systematic radio transmissions have been detected emanating from the planet. In any event, the expedition should enter the Jovian system in November 2025.

In addition, a joint JAB/NASA unmanned mission is scheduled for launch towards Saturn in 2025 to follow up the Cassini probes. While it will survey the Rings and other aspects of the Saturnian system, the focus for study is said to be the moon Titan.

