SECOND EDITION

JOVIAN CHRONICLES

RPG PLAYER'S HANDBOOK

FROM DREAM POD 9

JOVIAN CHRONICLES

Tightly strapped in the linear frame of the cockpit, you wait impatiently for the launch signal as your spacecraft emerges on the ship's deck and is hooked up to the catapult. Suddenly, a warning klaxon, a surge of light and your 70-ton war machine is propelled into the vastness of space. Skillfully, you search the silent void around you for signs of the attackers. A flare of ion light betrays their presence — there!

Plasma thrusters at full power, you bring your massive railgun to bear and fire in one smooth motion, already dodging a hail of missiles launched by one of the black fighters. As your opponent's armored hide buckles under the multiple hits of the hypervelocity penetrators, his powerplant explodes in a blinding ball of fire. The computer confirms the kill as you recognize the CEGA imperial eagle on the attacker's wingman...

Inspired both by classic science-fiction and cutting edge anime, the **Jovian Chronicles** will take you beyond the confines of planet Earth to discover a solar system on the brink of war. Along the way, you will interact with a rich cast of characters and possibly alter the destiny of the Jovian Confederation — if not the human race — forever!

Get ready to enter the 23rd Century and step into the world of the **Jovian Chronicles**. Are you up to the challenge? This book features:

- A detailed world background and a rich setting for high adrenalin adventures;

- Extensive guidelines and tips for adventuring in the solar system of the 23rd century;

- Dual-stats for the powerful Silhouette CORE rule system, a highly acclaimed game engine that uses classic six-sided dice, and the widely popular d20-based rules placed under the Open Gaming License;

- And tons of anime-style archetypes, weapons, equipment and vehicles!

Requires the use of the Silhouette CORE rulebook™ published by Dream Pod 9, Inc., or a Roleplaying Game Core Book published by Wizards of the Coast®, Inc. You will also need a few six-sided dice, pen, and paper. Suitable for 2-6 players, aged 12 and above.

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CREDIT

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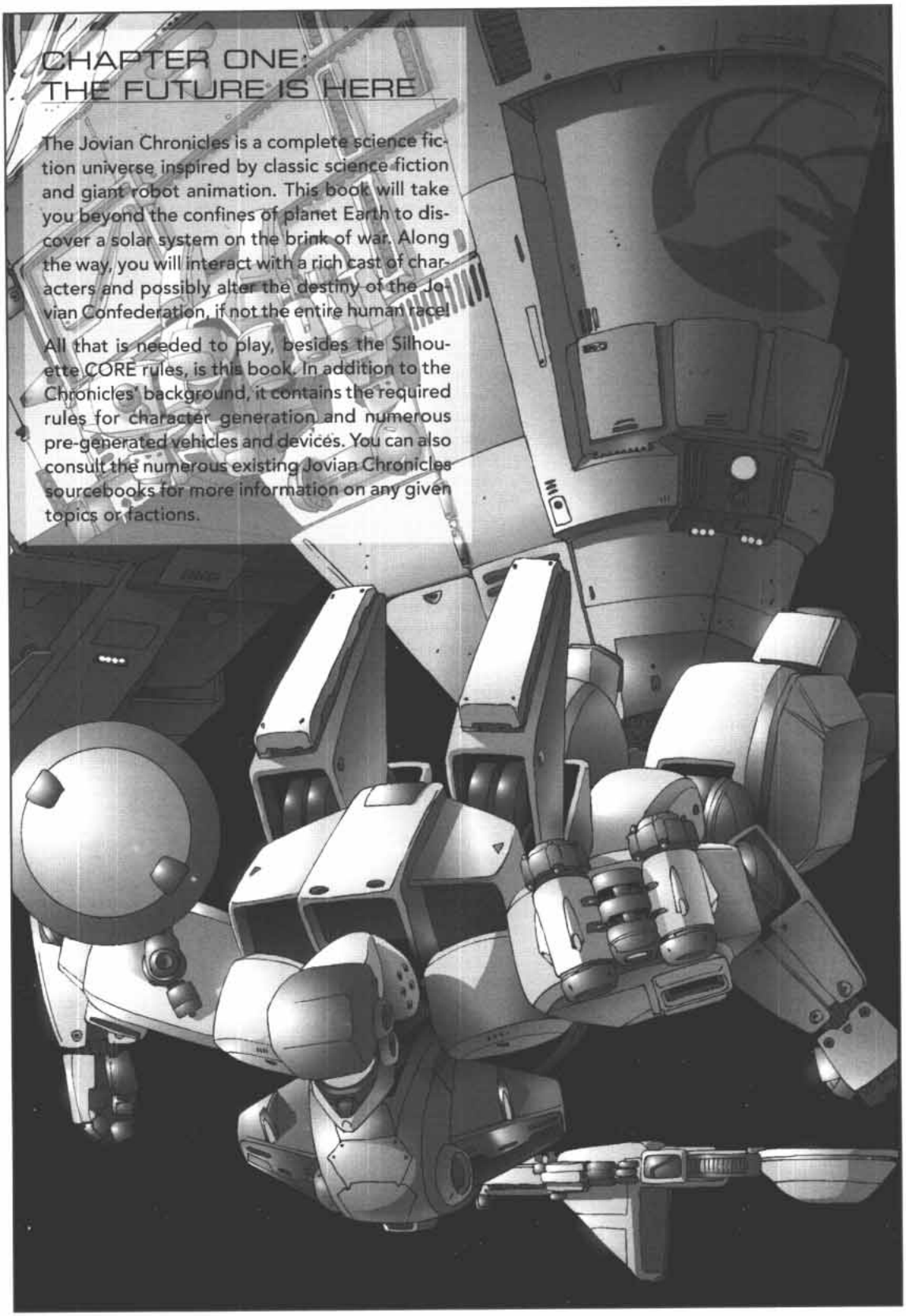
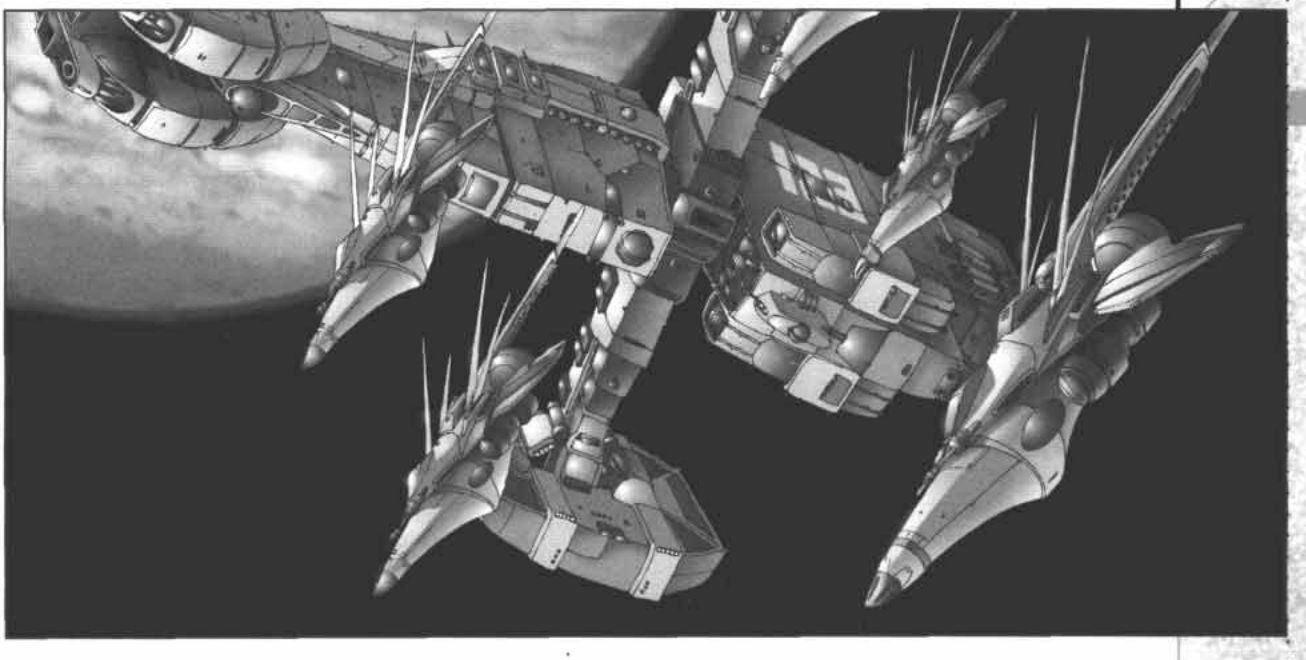
CHAPTER ONE: THE FUTURE IS HERE

The Jovian Chronicles is a complete science fiction universe inspired by classic science fiction and giant robot animation. This book will take you beyond the confines of planet Earth to discover a solar system on the brink of war. Along the way, you will interact with a rich cast of characters and possibly alter the destiny of the Jovian Confederation, if not the entire human race!

All that is needed to play, besides the Silhouette CORE rules, is this book. In addition to the Chronicles' background, it contains the required rules for character generation and numerous pre-generated vehicles and devices. You can also consult the numerous existing Jovian Chronicles sourcebooks for more information on any given topics or factions.





▶ THE SETTING

The year is 2210. Mankind has expanded into space since the beginning of the twenty-first century, establishing colonies on or around the planets of the solar system for resources and living space.

More that a century ago, after a prolonged period of environmental and social hardships, the global economy of Earth collapsed, leaving the planet in a state of turmoil and unable to care for its off-world colonies. The colonies then became independent, absorbing a steady flow of refugees from the war-torn Earth and surviving as best they could.

Independence was almost three decades ago; the colonies are now called the settlements, or "countries," of the solar system. The United Nations still exists, serving as a neutral ground for the governments of the various planets under the name of United Solar Nations (USN). The new Earth government, however, has aggressive policies that threaten the new-found peace in the solar system.

The tension is building up between Earth and most of the settlements. For the first time in two hundred years, space is being militarized. The players will now enter this world on the brink of war. Can they prevent it? Or will they cause it?

▼ GAME ELEMENTS

The Object of the Game: Unlike other types of games, roleplaying games don't have set victory conditions. The closest to it would be to a) complete the assigned mission or b) survive the mission. As play progresses and subplots emerge, winning becomes a matter of resolving problems and making one's character grow and evolve.

Default Player Option: Most of the players will probably start out playing exo-armor pilots or agents of the Jovian Confederation. These are the most readily-accessible type of characters, and give the Gamemaster an excuse to supply the group with lavish gifts and equipment. See Chapter 4 for making characters for the game.

Advanced Character Types: One can take on the role of a SolaPol agent, or perhaps a pilot in the CEGA navy. More advanced players will no doubt want to venture out on their own into the solar system and create free traders, explorers, or just plain adventurers. The solar system is vast and new characters will have no problem finding trouble and mischief to get into.

Default Bad Guys: Agents of the Central Earth Government & Administration are often up to some kind of mischief, whether spying on other settlements or "acquiring" new protectorates in the Asteroid Belt. CEGA often likes to back up their threats with firepower — there's a lot of vacuum out there to hide the bodies!

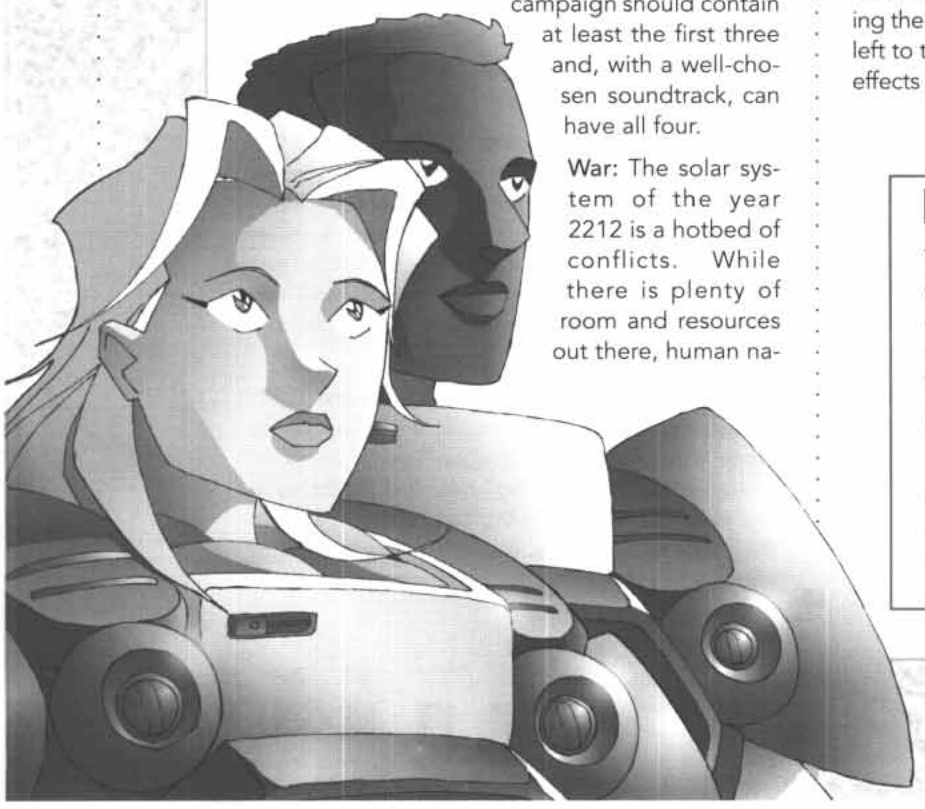
Advanced Bad Guys: The politics of the solar system are filled with intrigue. When the corporations of Venus, led by the infamous VenusBank, are not up to something, other factions advance their own plans, whether it's the Merchant Guild protecting its trade routes, a terrorist group vying for political gains or a group of scientists seeking to escape the vigilant eye of SolaPol's Edicts Bureau.

NOTES: THE JOVIAN ARMED FORCES

Putting the default player option as a pilot of the Confederation's fleet is primarily a hook to give the player characters a ship to move about the system, expensive toys like exo-armors, and interesting leads. It greatly simplifies the task of the inexperienced Gamemaster, and still leaves the door open for more complex stories later on (such as espionage or exploration plots).

▼ THEMES

The twenty-third century is a time filled with excitement and promise as well as deadly phenomena. While humor certainly has its place, games taking place in the Jovian universe should be run with a serious outlook. Players must be aware that the consequences of a false move can very well be fatal to their character. Japanese animation (or "anime"), on which the **Jovian Chronicles** are partially inspired, is often based on four main elements: War, Death, Relationships and Music. Your campaign should contain at least the first three and, with a well-chosen soundtrack, can have all four.



War: The solar system of the year 2212 is a hotbed of conflicts. While there is plenty of room and resources out there, human nature remains the same: some people still want to impose their views on others, even when separated by millions of kilometers. The Jovians want to explore as they want, CEGA wants political control, the Venusians seek economic domination. Lucky for us, since conflict means drama (and therefore great stories).

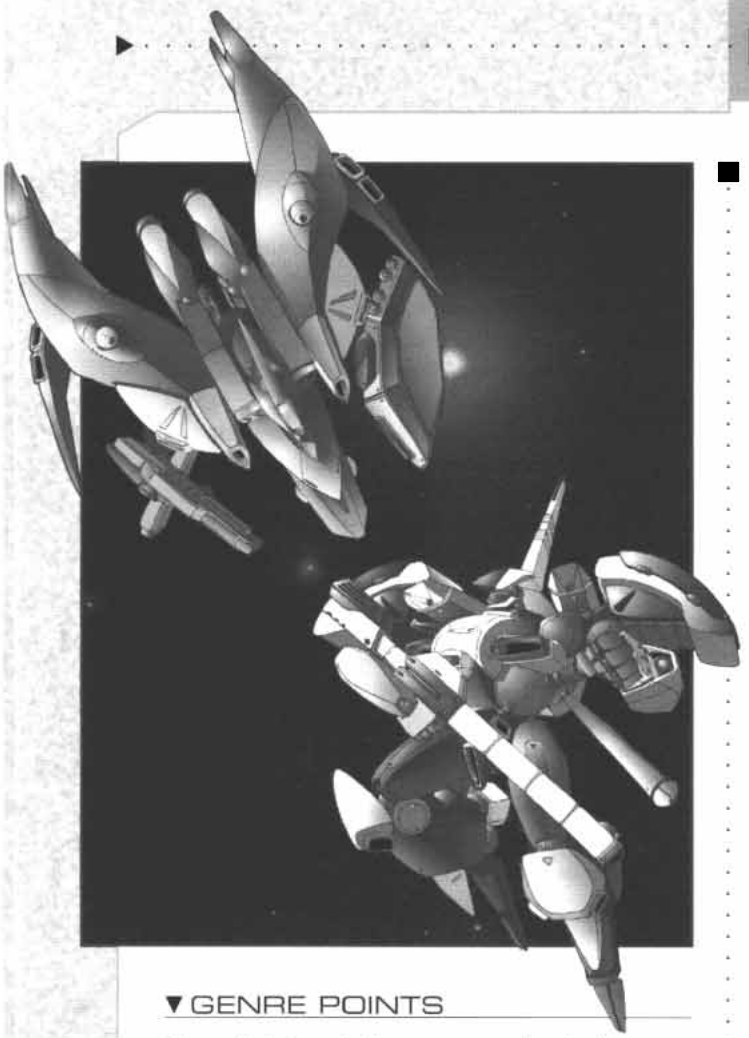
Death: Playing poker is no fun unless you can lose your shirt, too. The characters of **Jovian Chronicles** live life on the edge in the most hostile environment ever. They face radiation, vacuum, beam cannons that can punch a hole through a battleship and well-connected ex-lovers that will move the solar system to get back at them. Every story, the characters put everything on the line. Decisive actions and decisions never come easy.

Relationships: Good stories are about people — the exo-armors and spaceships are the cool trimming, but at the core we must care about the characters. Stakes are highly personal: the enemy squadron leader is never just the bad guy, he happens to be your long-lost brother, too. Even the most rotten bad guys have a good side one can relate to. A good **Jovian Chronicles** character will usually spend as much time dealing with personal problems as he will solving the mission at hand.

Music: Many anime are known for their great soundtrack. This can enhance your playing experience, too. An opening theme song to start each session is almost mandatory: use any song that is dynamic and fast-paced. The closing theme can be any moody and sentimental song. Various instrumental soundtracks can be used during play, especially during the fight scenes; the choice of music is of course left to the taste of the playing group. Proper sound effects can add great flavor, if correctly done.

REALISM

The reader must be aware that certain artistic liberties have been taken with history and science as we know them today. Although the Silhouette CORE game engine is pretty realistic, the players will generally not have to deal with the mundane (!) aspects of space life: fuel, oxygen, high radiation, orbits, etc. These elements will come into play only if they move the plot along; otherwise, they drag down the game and transform a cinematic, high-action adventure into an evening of dice-rolling, calculations and paperwork.



▼ GENRE POINTS

Genre Points and other game mechanics (see section 6.4 of the **Silhouette CORE rules**) will allow you to influence the plot and the story, creating a game that has stronger genre emulation — in this case, anime-style giant robot stories — and a more heroic feeling overall. The characters can use the Genre Effects from the list below. The Gamemaster can veto the use of any approved Effect if desired.

Burst of Angst: Witnessing a traumatic event, such as the death of a loved one — a fellow pilot, perhaps? — unleashes a berserk rage in the character (typical in many giant robot anime). Each Genre Point spent allows one Attribute Point to be moved from Psyche to any other Attribute except Build. Psyche cannot go below -5. This lasts until the end of the current scene or combat.

Creative Stunt: By spending 1-3 Genre Points (based on how powerful the stunt is), a character gets to use a Skill, Perk, Special Ability or piece of equipment in a new and creative way, once. For example, the firing spring in the character's handgun just happens to match the broken part in the control panel.

Inner Well of Strength: The character can tap his willpower to temporarily fuel his flagging strength. For one Point, the Action Penalty of a Flesh Wound is ignored for the rest of the crisis. Three points overcomes a Deep Wound. This may be used multiple times, but only on one wound's AP per round (it is possible to return to full "health" after several rounds). The wounds themselves still exist, and still need healing or medical attention.

Last Hurrah: There may come a point where a hero just isn't going to make it out alive. If a character suffers a fatal wound (or his vehicle is Overkilled), he may spend all his remaining Genre Points in one final effort. His actions must be directed towards saving other characters, taking out villains/henchmen, or ensuring that vital information or equipment is passed on. The Gamemaster decides how long this effect lasts, but it should not be longer than a few 6-second rounds. A character doing a "Last Hurrah" ignores Action Penalties from all his current wounds as well as any new wounds he receives. At the end of the "Last Hurrah," the character dies and cannot be revived.

Sweet Success: Each Genre Points spent adds 1 to the final result of any Skill roll. This can be done even after the roll is made.

DUAL STATTING

Game stats for both Silhouette CORE and the d20 3rd edition ruleset are provided in all recent books of the **Jovian Chronicles** line, starting with **Cislunar Space**. Though the SilCORE stats are somewhat more detailed, feel free to use the system you feel most comfortable in — given that the d20 rules and stats are available elsewhere in their own core books and on the Internet, we simply referenced them as needed rather than reprint them wholesale.

Older titles in the game line contains only Silhouette stats but can be easily updated to SilCORE standards (in most cases, they are useable as is). Needless to say, background information, biographies and adventure seeds need no change and can be readily used. Visit the Dream Pod 9 Web site for a complete list of **Jovian Chronicles** products (and many free game aids) at: http://www.dp9.com

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▶ HISTORY: THE NEW FRONTIER

The second half of the twentieth century was rich in scientific improvements and social revolutions. For the first time in recorded history, Mankind set foot into space. This began with tiny, hesitant steps, which then grew more confident. By the end of the century, low orbit was filled with satellites of all kinds and primitive space stations had been put into space.

In 1977, Gerard K. O'Neill proposed a new design of giant space station that could become a home away from Earth to many thousands of people. Similar designs were later proposed, some of them dispensing with the large "windows" of the O'Neill concept. The open-type space colony, soon named the O'Neill Cylinder because of its designer and shape, lingered in the files of NASA and other space agencies for nearly a complete century as society and technology struggled to catch up with the idea.

In 1982, the first launch of a reusable space shuttle by the United States of America heralded the days when space would be easily accessible to private and national concerns. Even though the shuttle program suffered some terrible setbacks, it opened the way to the TAV (trans-atmospheric vehicles) and SSTO (Single Stage To Orbit) vehicles of the early 21st century.

▼ THE QUEST FOR ENERGY

Pollution became an endemic problem in the closing years of the 20th century, with entire regions condemned because of industrial accidents. Less polluting alternatives in the fields of power generation and heavy manufacturing were needed to reduce the strain on the environment. In August 1997, a small Japanese corporation, Ohita Electronics, released a second generation solar cell which had ten times the efficiency of any previous design. A mere six months later, NASA officials were proposing the Solar Power Satellite project to Congress, and a test program was approved with political and financial backing to hurry it along.

In December 1999, the Space Shuttle *Endeavor* placed the first experimental Solar Power Satellite, XSPS 1, in orbit. Early tests were successful, and the SPS project was approved: it would be implemented over the next twenty years. The need for a permanent, self-sufficient space station for the maintenance and construction of the solar arrays soon became apparent — more urgent than originally thought by those who had masterminded the project. Three years later Prometheus Station Module 1 was launched atop an Energya-class, rocket and talks about a lunar base began the next year.

While governments talked of the glorious age of space travel, private companies invested in space vehicles of their own. Their efforts would bear fruit in the first decades of the twenty-first century and proved that private interests, not governments, would take Mankind into space.

◇ ARTIFICIAL SUNS

November 9th, 2007 was the day when a prototype fusion engine managed to sustain a fusion reaction and generate power for six hours. This breakthrough in the field of nuclear fusion came from the combined efforts of teams from the United States, Japan and Canada.

Their reactor was based on muon-catalyzed fusion, developed from a line of research first explored by Luis Alvarez and Andrei Sakharov. Subatomic particles are used as a catalyst, to bring atoms much closer together and allow fusion without the need for bulky, power-consuming containment units.

▼CHARIOTS OF FIRE

The main stumbling block of the space project remained the inefficiency of the chemical engines used for spacecrafts. The next generation of engines combining fusion energy and liquid fuel was released by 2007. The trial flight of the Megaloader-class shuttle, the first space cargo vehicle using fusion technology, took place only four years later.

The Megaloader vehicles were developed by a consortium of private enterprises that steadfastly refused any help from the government. These next generation machines could easily hoist nearly twenty tons of payloads into low Earth orbit and return to land near their launching point. The success of the project started several research programs in many of the industrialized nations, and similar cargo ships would be used routinely over the next forty years to deliver ever increasing amounts of material and people into low Earth orbit.

The next development in space technology was to come from an unlikely source. An efficient high energy laser was perfected by six MIT students and presented in March 2015 for their end of semester project. A mere month later, all 'Project Photon' students were hired by NASA and given a lavish research budget. The first Laser Launch System (LLS) prototype was constructed at Cape Canaveral two years later. Unfortunately, the first test flight — on September 17th, 2017 — was a complete failure. The test rocket was disintegrated by the LLS as it rose from the pad. Despite this early setback, LLS research continued over several years, and the technology was eventually made practical enough to be mounted on many lunar and orbital launch facilities.

Meanwhile, additional researchs into magnetic accelerator devices (in effect, magnetic catapults), based on the earlier NASA, Princeton, M.I.T. and Japanese works were coming to term. Each catapult could push mass with great acceleration (hence the name massdriver), making a new useful tool for both warfare (as a gun), travel (as a reaction engine) and transport (as a means to launch or boost material at low costs).

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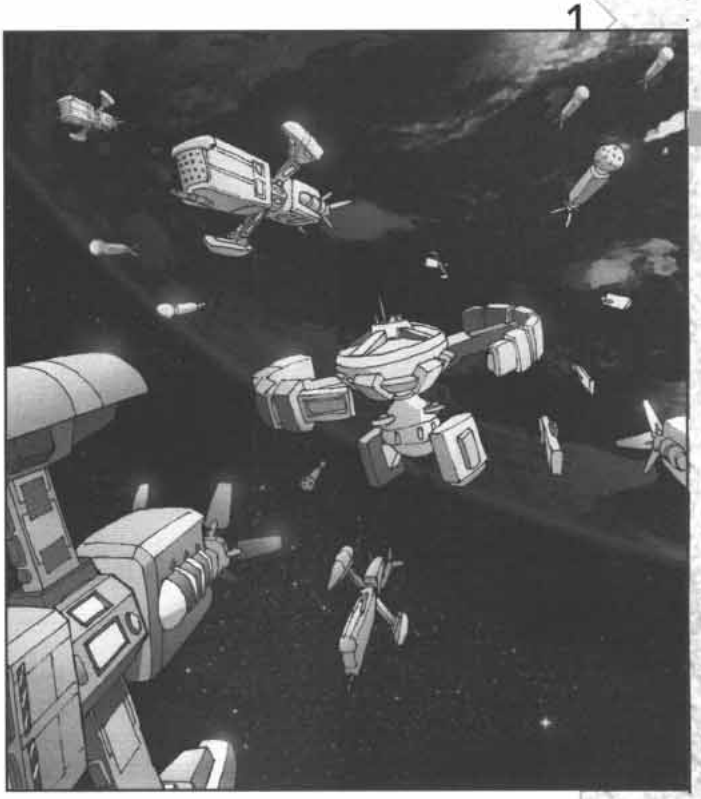

SPACE TRAFFIC CONTROL

The development of reliable and privately operated launch vehicles led to a rapid increase in orbital traffic during the first decades of the twenty-first century. By 2020, it became evident that some kind of multi-national traffic control service would have to be implemented lest accidents and catastrophic mishaps occur on a routine basis.

This led to the formation in 2022 of the International Space Traffic Control Office (ISTCO). The ISTCO was first composed of five large control centers, one for each STC orbital zone. As spacecrafts flew off from the launching pad they were considered to be under the jurisdiction of whatever authority governed the local airspace. In order to facilitate the transition to space, each craft was taken as a charge by the local ISTCO center as soon as they reached an altitude of 100 kilometers. As each spaceship moved in and out of orbital zones, computers and other automated devices ensured that they were taken in charge by the next zone. By the twenty-third century, similar systems were in place over all inhabited worlds.

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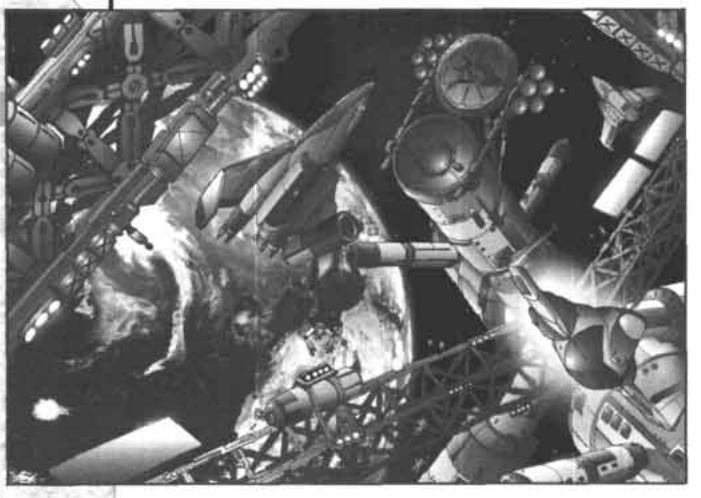

▶ THE COLONIZATION AGE

The projected construction of the skyhooks, or space stations that could lift light cargo from orbit, raised the enthusiasm of the general public. New projects were proposed almost daily by government agencies and private concerns, all eager to use this new low-cost launching alternative. The need for abundant construction material soared and so in January 2024, the first permanent lunar base was established. Moon Base Alpha was a mining and construction station made up of two domes, one landing pad and crewed by a multinational team.

▼ MARS DIRECT

The new wave of interest in the conquest of space brought back the half-forgotten project of the exploration and possible colonization of Mars. In particular, the existing space facilities made it easy to launch a single stage Earth to Mars mission. Each Mars Direct mission was composed of paired spaceships, one manned and one unmanned. The unmanned spaceship contained the return vehicle and a miniaturized refinery capable of extracting the required fuel from the Martian atmosphere. The manned mission was launched only when it was determined that the return vehicle was fueled and ready.

Using the experience and vehicle technology gained from the lunar base, the first mission to Mars left in early 2027. The return vehicle was already in place, having soft landed two years earlier on a pad prepared by robotic drones in the early '20s. By the time the first crew left, four other Mars Direct spacecraft were under construction, ready to spearhead the construction of the first permanent human city on Mars.

▼ HIGHWAY INTO SPACE

Although the development of efficient launch systems significantly reduced the cost of placing material in orbit, the cost per kilogram was still considered too high. The orbital elevator concept, or skyhook, was one of the early options studied as a possible means of reducing launch costs.

The early plans for an orbital elevator consisted of a space station placed in a geostationary orbit. The station was to simultaneously extend tethers down toward the Earth and in the opposite direction, thus keeping its center of mass (and orbit) constant. The lower cable was anchored to the ground and elevator cabs could be used to transfer material up into space. The outer tether also allowed payloads to be released with greater than orbital velocity, launching them into space at no fuel cost.

Preliminary studies soon showed that such a device would be near impossible to build. Each segment of the tether had to hold not only the payload but also the weight of each segment under it. The tether thus got thicker and thicker, and monstrous taper ratios were calculated. It was proposed that the space station's orbit be lowered and the tether stopped just above the tangible atmosphere, reducing the system's overall length. This made the construction of the skyhook (as the new system was called) possible with present-day technology. Although the base of the tether would be traveling at hypersonic velocity relative to the ground, specialized shuttles could already be built to reach it. Skyhook construction began on the lunar base hangar while the delicate electronics parts were being assembled on Earth.

By 2020, nations were assembling forests of skyhooks in orbit, enabling increasingly heavy cargoes to be lifted at very little cost. Some were put to work in large "teams," their combined capacity allowing extremely massive payloads to be slowly lifted into orbit — the only limit being the size of the cargo bay of the hypersonic shuttle, and even this caused fewer problems once the fuselage-mounted cargo pods were put in service. SSTO vehicles took up the job of taking people and priority cargo up.

Mankind had built its first highway to the stars.

NEW TECH

Exatech Chemicals introduced the first mass-produced artificial diamond fiber composites in September 2026. They were produced under zero-gravity conditions aboard Exatech's ground-breaking automated space factory, a comparatively small construct orbiting a few hundred kilometers above the ground.

Although costly, the new fibers were much less expensive than diamonds hauled up from the surface of the planet and these new composites were perfect for high stress applications. These fibers could easily be formed into cables, sheets and panels of extreme solidity and low weight. New skyhook designs built using these composites nearly tripled the lift capacity of previous models.

In November 2027, Yokohama-Grubb, a multinational company specialized in pharmaceuticals, announced the first successful human cloning experiment. The baby was an offshoot of the company's organ-regeneration research, and although its birth was not planned (or approved) by the board there was little they could have done once it was born. Public outcry and indignation almost ruined the company, which immediately fired its entire bio-research division. Adam, as the baby was called, was placed in a research institute.

As he grew up, the child turned into a strong, healthy and intelligent boy. He was plagued by self-doubts, however, and underwent psychiatric therapy several times. On his seventeenth birthday, Adam, the first cloned human, committed suicide.

▼ISLANDS IN THE SKY

The increased level of prosperity on Earth helped slow down the rate of growth somewhat, as families in developed countries required fewer children to ensure their future. The overall human population, however, continued to grow at a quasi-exponential rate in the new space colonies and in poorer regions of the globe. New lands were cleared, rain forests destroyed, and soils exhausted by repeated farming with inadequate methods.

The Alpha Base massdriver became operational on August 28th, 2028. It was used to fire large cargo sleds at Earth's Lagrange point (see glossary). The first test sled reached the L-2 point without any problem. There, automated "masscatchers" intercepted and stockpiled the ore packets for later delivery to planned local construction sites. The excellent performance of the lunar massdriver showed that sending large quantities of material to the Lagrange points (or any of the complex, inner Earth orbits) was fairly cheap, and the first permanent orbital settlement projects were seriously proposed. These settlements would house the construction crews required to build the second generation SPS arrays and orbital factories. They were also meant to be huge so as to absorb at least part of the population growth.

After much debate and inflamed discussions, the space island project based on the O'Neill Cylinder design was approved by the American Congress, the European Council and the Russian Space Agency. In November 2030, the construction site of Island One at L-5 was formally declared open after a four-hour ceremony on Earth.

▼THE SOLAR COLONIES

As the human population in orbit increased, the people of the Earth sphere started looking toward distant planets. The skyhooks allowed probes to be cheaply launched to the into deep space with relative ease. For the better part of the '20s each planet was radar-mapped and examined by numerous probes and robots.

On July 1st, 2031, the NASA/ESA exploration ship *Galileo II* was launched. The ship carried both solar arrays and an onboard fusion reactor to power its kilometer-long massdriver. Jettisoning fine rock particles at very high speed to produce thrust, the ship set out on the first leg of its journey to the outer system. On March 14th, 2032, *Galileo II* arrived in the Jovian system. Robot probes were immediately dispatched to recover the asteroid dust packages left by previous automated missions, refueling the ship for the voyage home. The ship remained in the Jovian system for nearly six months, conducting experiments on gas mining and performing astronomic studies.

Burroughs City, the first permanent Martian settlement, was officially founded in 2033. At the time, the town was little more than a collection of landing modules left by previous missions and housed a mere 85 people.

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In 2034, a small mining/scientific mission was sent to Mercury. Funded solely through private efforts, a permanent base was established. Soon its massdrivers started throwing rocks at Venus. The private investors claimed these were solar sail test shots, using mining rejects, and were sent to Venus so as not to fill the space lanes.

Based on the findings of the Galileo II mission, the Jovian Gas Mining Corporation was founded in February 2037. A year later, Ironwheel Station was built in Jovian orbit to house the gas miners. It was the first permanent human habitat around Jupiter, and the one most distant from the Sun. The station was completed in a remarkably short time, and by 2040 housed nearly 1000 people, many of them scientists. The formation of the JGMC heralded the age of the space companies, corporations formed to exploit the riches of the solar system.

THE SPS3 AFFAIR

The rescue of the SPS3 hostages in 2032 remains in the annals of history as the first use of exo-suits in a tactical space combat. Religious extremists had taken over the SPS3 Powersat and were threatening to use it as a weapon of terror should the world refuse to convert. The crew had managed to take refuge in one of the modules, where they awaited rescue.

Although the power beam made a poor weapon, it was sufficient to severely damage a ship. The rescue thus came as a squad of USASF exo-suits, stealthily closing in. They first disabled the emitter array, and then set to work on flooding the command module with sleeping gas to flush out the terrorists. The latter, however, had outside help in the form of two stolen OTVs, each equipped with a chemical com laser. Before long, the battle raged around the satellite, as each side tried to place itself on a vector that would allows its weapons to lock on the enemy. The two OTVs were eventually disabled, and all terrorists were later found dead from poison tablets.

▼A POPULATION EXPLOSION

By the end of the first half of the twenty-first century, the total human population, on Earth and elsewhere, reached nearly 13 billion individuals. The first three Island One stations were completed, each fully inhabited by nearly 140,000 people. The increasing automation of the process and the improved launching capability of the lunar base (now with three massdrivers) made the construction of a new station a matter of one or two years, prompting a migration to space. Proposal for larger Island Two type stations, with a diameter of two kilometers and four times that length, were put forward.

Some were willing to go even further out to escape the Earth. Industrial-type spacecrafts excavated and outfitted asteroids for prolonged habitation then placed them on circular orbits between the Earth and Mars. These asteroids, called cyclers, could carry thousands of colonists to Mars on every one of their two-year cycles. During the general census of 2070, the Martian population was counted at nearly 2 million inhabitants, almost half of them being immigrants landed in the past thirty years. The first permanent nomad settlement was established on Eros in the Asteroid belt by mining corporations eager to exploit the mineral riches of the new frontier.

INCREASED THRUST

The solar system's colonization was further advanced by the development of new technologies, such as the Plasma Combustion Chamber (PCC). Experiments to improve the efficiency of the fusion power plant led scientists at the L-5-2 colony to develop the prototype of a new type of space drive. The PCC uses high energy arcs to convert almost any fine matter or gas to a plasma state and jettison it at high velocity to create thrust. Although the initial tests were plagued with technical problems, the PCC proved much more efficient than the massdrivers and chemical rockets in wide use for spaceship propulsion.

▼ PROJECT NEW EARTH

Meanwhile, the Venusian atmosphere was getting a lot clearer. The reactive metals relentlessly sent from Mercury combined with the atmospheric gases to form carbonated dust falling on the surface. Conditions on Venus improved and the surface became directly observable. In the early months of 2070, ten mysterious rockets were launched from the orbital facilities of Boeing-Mitsubishi, their projected trajectories leading to Venus. Three weeks later, robot OTVs were dispatched from the Belt-based Westmuller Ltd mining station to rendezvous with the newly discovered Stanton II comet approaching the solar system. Corporate officials from both companies declined to comment.

On March 1st, 2072, Project New Earth officially began. The rockets descended in the Venusian atmosphere, releasing their cargo of genetically engineered bacteria and algae. Both immediately started processing the soil and atmosphere to make them compatible with Terran biology. Two years later, the Stanton II comet, its orbit modified by the small fleet of tugs attached to its flanks, entered the Venus' orbit. Many thought the comet would disintegrate in the upper atmosphere, ruining the terraforming process. Instead, the comet was placed in a stable, easy to reach orbit around Venus to serve as a refueling point for ships and shuttles bringing people and equipment to the new world.

Immense titanium fins were first installed at the settlements' projected polar locations to cool down the boiling hot ground. Large quantities of aero gel, an isolating polymer/ceramic substance, were manufactured to form the foundations and outer walls of huge arcologies. Within a few years, small settlements dotted the Venusian poles.

▶ DEPRESSION

By the second half of the twenty-first century, the biosphere of planet Earth was in sorry shape. Widespread droughts and floods were battering the cities. The ozone layer was very much depleted, even though programs limiting the production of ozone-depleting gases had been in place for decades. The development of new non-polluting energy production alternatives were only slowing down the problems caused by Mankind's insatiable need for power-sources.

Social and environmental pressures caused the collapse of several nations. Civil war, epidemics, and balkanization provoked a major exodus toward space and the colonies. Entire villages pooled their life savings to buy a patch of land on a colony in the solar system in the hope of improving their living conditions.

▼ EXODUS

In early 2081, the provisional Terran government, an evolution of the United Nations council, took refuge in orbit. Several of the more prominent nations of Earth along with the orbital colonies formed this council. To reflect this change, the council officially took on the name of United Space Nations.

The inhabitants of Mars declared their independence in the summer of 2085. Despite their best efforts, there was little the beleaguered Earth nations and corporations could do to stop them. By 2086, all Terran authorities had been removed from the red planet. This did not solve any problem, however, and civil conflicts would rage for many years before a native Martian political structure would evolve.

During this time, the terraforming of Venus was progressing. Financing corporations started establishing bases in the northern polar region by the first quarter of 2086, landing entire prefabricated factory units to help in the construction of future arcologies. Corporate personnel were shuttled in from orbital colonies at a rate of several thousand per month.

In the year 2093, the last vestige of authority fell on Earth and the subsequent loss of their space faring capacity isolated the Earth from the rest of Mankind. The governments of Earth had lost any remaining authority they might have had over the space colonies.

▼ TOUGH TIMES

The period from the 2120 to 2180 was often referred to as the "Tough Times." With Earth in disarray, each settlement was more concerned about its immediate survival than politics or trade. The new Venus colony was busy settling down, while there were intermittent civil conflicts on Mars. The Jovian settlements struggled to survive the harsh conditions of their environment. Many of Jupiter's Trojan asteroids were dismantled and used to build new colony cylinders to house the growing Jovian population. Nevertheless, limited living space remained an endemic problem.

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▼ PLOWSHARES INTO SWORDS

As time went by, the general level of technology improved and with it the science of war. Exo-Suits became larger and more powerful, carrying advanced ECM and stealth systems to disguise their increasing size. In the 2150s, technicians of the Jovian Confederation, merging the engineering tug and the exo-suit, built the famous "giant robot" of science fiction.

After months of testing, the first prototype Exo-Armor was ready to be shown to the Agora on July 23, 2162. It still lacked several important systems, but it could walk and fly. The representatives were extremely impressed by the performance of the machine, and approved a plan to equip the fledgling JAF with sixty Exo-Armors within the next five years.

▶ NEW BEGINNINGS

The resolution of the troubles on Earth signaled the end of a dark period for the solar system. Contacts were slowly re-established between Earth and other settlements. Once again, spaceships started making regular runs between planets, exchanging high technology products and specialized items that could not be produced locally. Even tourism saw a renaissance of sort, though the high cost of space travel restricted it to the wealthy or those ready to save for the trip of a lifetime. It was the beginning of a new age of peace and prosperity.

▼ REUNIFICATION OF EARTH

The period of civil conflicts and unrest on Earth had degenerated into outright war in many regions as diverse groups competed for the same dwindling resources. Before long, a league of small nations banded together under one flag and was methodically taking over as many territories as possible. The Union, as it was called, consisted mostly of European and North American states. Their aim was to unify the entire planet under one government, by negotiated alliance or, if necessary, by force. Its leaders wanted to stop the bloodshed and give people the means to restore the planet and earn a good living from it. The Unification War, as the drawn-out conflict came to be known, ended in 2182.

On January 1st, 2184, the Central Earth Government and Administration was founded by the victors of the Unification War. Although they did not control the entire planet, CEGA did administer North America, Europe and large parts of Africa and Asia.

▼ TITAN

Titan was first explored during the 21st century. Once it became clear that the moon was studded with organic liquids, and contained oxygen and nitrogen, it was suspected life could be found at the bottoms of the deeper ethane seas.

In the decades prior to the Fall, there was a wide basis of Terran pro-Green sentiment, as living conditions had started to deteriorate on the home planet. The major Earth nations (and the reluctant space borne corporations) met in Reykjavik, Iceland in 2062 and signed a treaty agreeing to ban industry from the Titanian surface. The Treaty was to be ratified anew by the participants every fifty years. It did not prohibit human habitation of the surface, but with the exception of IGS' Alcott research station, no one wanted to live there.

The Treaty left open the option of exploiting Titan's upper atmosphere, which contains a significant amount of methane. By the early 22nd century, with the Jovian Confederation's population growing (and cut off from Earth's supply of organics), this was an attractive possibility. Consequently, stratospheric gas mining robot equipment was set up as early as 2128, and some small launch platforms were set up in Titanian orbit to send the products to Jupiter.

This continued for a long time, with the Reykjavik Treaty receiving its second (in absentia) re-ratification by the Orbitals, Selenians, Martians and Jovians in 2162. But in the 2180s, Bernardo Chandrasekhar's new gas-mining company THC changed the rules, claiming that the Reykjavik Treaty permitted exploitation of the surface as long as the industry was based in orbit. Building a pair of large refinery stations, he began to use huge shuttles to ferry the liquid methane to orbit, for bulk conversion into complex hydrocarbons. Within a few decades, THC achieved a monopoly on Titanian commerce and became a major player in interplanetary economics.

▼ THE MARTIAN ELEVATOR

Although the skyhooks used on Earth proved to be the limits of the technology available at the time, the dream of a space elevator reaching to a planet surface was not dead. Mars, in particular, was interested in the concept. The lower Martian gravity, combined with the smaller radius of the planet and the advances in the material field, would theoretically make such a device possible.

Several corporations were intrigued by the idea. The Martian natural resources, when combined with the elevator, would make it economically feasible to build certain delicate spaceship components on the ground and send them into orbiting shipyards. After years of studies, the Venusian backers authorized the construction of the prototype on June 1st, 2189. The Martian orbital elevator opened officially seven years later.

The twenty-third century dawned upon a solar system at peace.

▼ THE ODYSSEY

The resolution of the troubles on Earth signaled the end of a dark period for all. Contact between settlements slowly resumed. It was thought to be the beginning of a new age of peace and prosperity — the events of 2210 would shatter that illusion.

In the early 2200s, Terran scientist Doctor Agram Peyarje developed a "cyber linkage" system for partial thought-control of machinery and vehicles. CEGA agents quickly realized that it could be used for military purposes and conscripted him. Fearful of the imperialistic views of CEGA, the scientist managed to contact Jovian operatives and requested political asylum. At about the same time, living creatures were discovered in the atmosphere of Jupiter. Though the event was kept highly secret, within months scientists had discovered what incredible biological treasures these creatures represented. Poaching began right away, with the greatest efforts being made by the Venusians (whose researchers had determined that certain of the creature's proteins could be used as a life-prolonging drug). They were using a variant of the cyberlinkage prototype stolen from Earth, a fact they were keen to hide.

A small team of inexperienced Jovian Armed Forces pilots was sent to Venus, where the scientist was attending a seminar. They succeeded in helping Dr. Peyarje escape, but were discovered and pursued across the solar system by forces that were later revealed to be sponsored by both CEGA and Venusian interests. The fleeing group was helped first by Lunar-based rebels (causing the destruction, in retaliation, of the domed city of Copernicus) and later by Martian sympathizers. The Earth forces proved tenacious, however, and tried to stop them even on foreign ground. The Martian prototype orbital elevator was destroyed in the ensuing confusion by a group of anti-Federation Martian anarchists.

By the time the group reached Jovian territory, an entire battle fleet was at their heels. Unknown to most, the admiral in charge, Russel Kleb, was manipulated by Venusian Bank executives intent on destroying Elysée, the capital-station of the Jovian Confederation; this would open the way to full-scale exploitation of the local "resources" under the pretense of Venusian emergency humanitarian aids. After what would later become known as the Battle of Elysée, the station was saved, an entire CEGA battle fleet was destroyed and one of the JAF's commanding officers, the very man who directed the Peyarje mission, was arrested as a traitor for allowing the CEGA fleet to come this far.

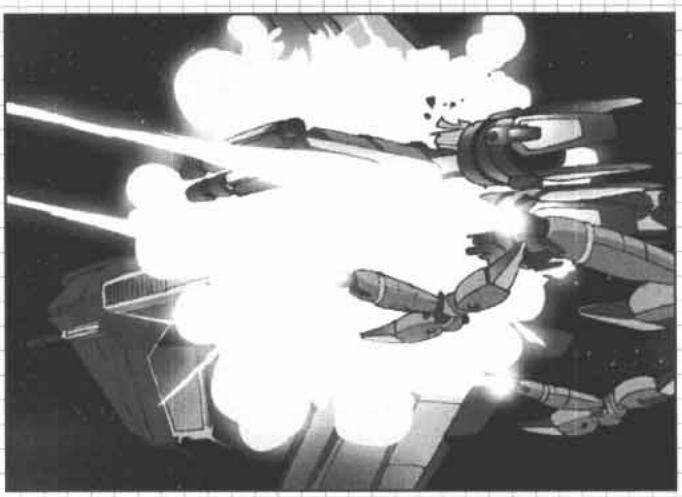
The months following the Battle were tumultuous, to say the least. CEGA officially declared its fleet to have gone rogue while a witch hunt started to find the people responsible for the whole affair. The true culprits are safely out of sight, however, and a new, troubled age has just begun...

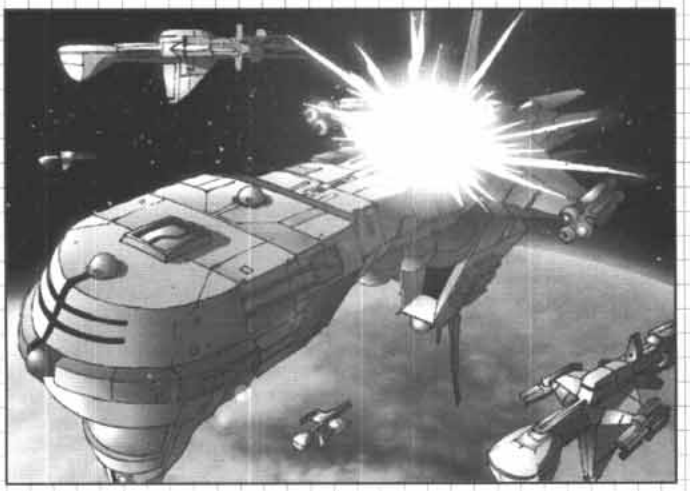
SPACERS

As Mankind moved into space, a brand new culture emerged in reaction to the harsh conditions of the new environment. Spacers were bright, inquisitive, social and, above all, cautious — those who didn't possess these qualities generally failed to survive.

COMBAT

Space warfare is superficially similar to underwater combat: a fully three-dimensional environment, enemies that hide, and deadly external conditions. In addition, weaponry needs to be both accurate and powerful to span the vast distances, which means that any hit is likely to cause enormous damage.



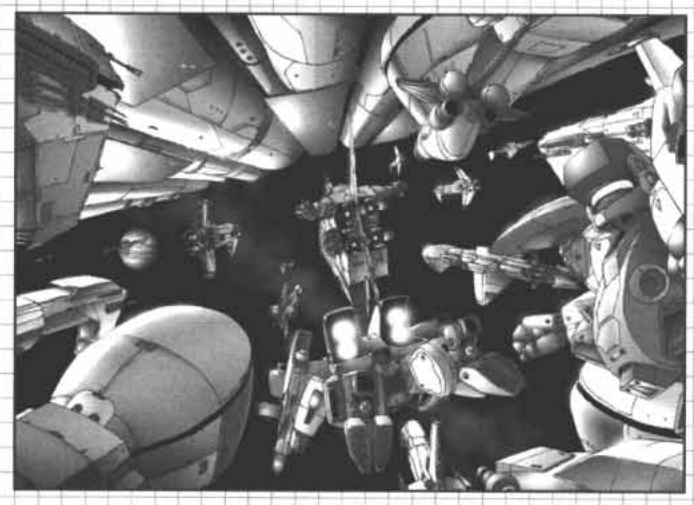


SIZE

As technology improves, spacecraft become larger and larger. The mighty warships of the Jovian Confederation (left) and those of the CEGA are massive slabs of armor and offensive systems, able to move only thanks to the awesome energies generated by their fusion drives.

PASSION

Most of those emigrating to space are driven characters seeking to create a better future for themselves and their descendents. This has led to many ideological conflicts along the way, though competing cultures can still find empty space to expand into.

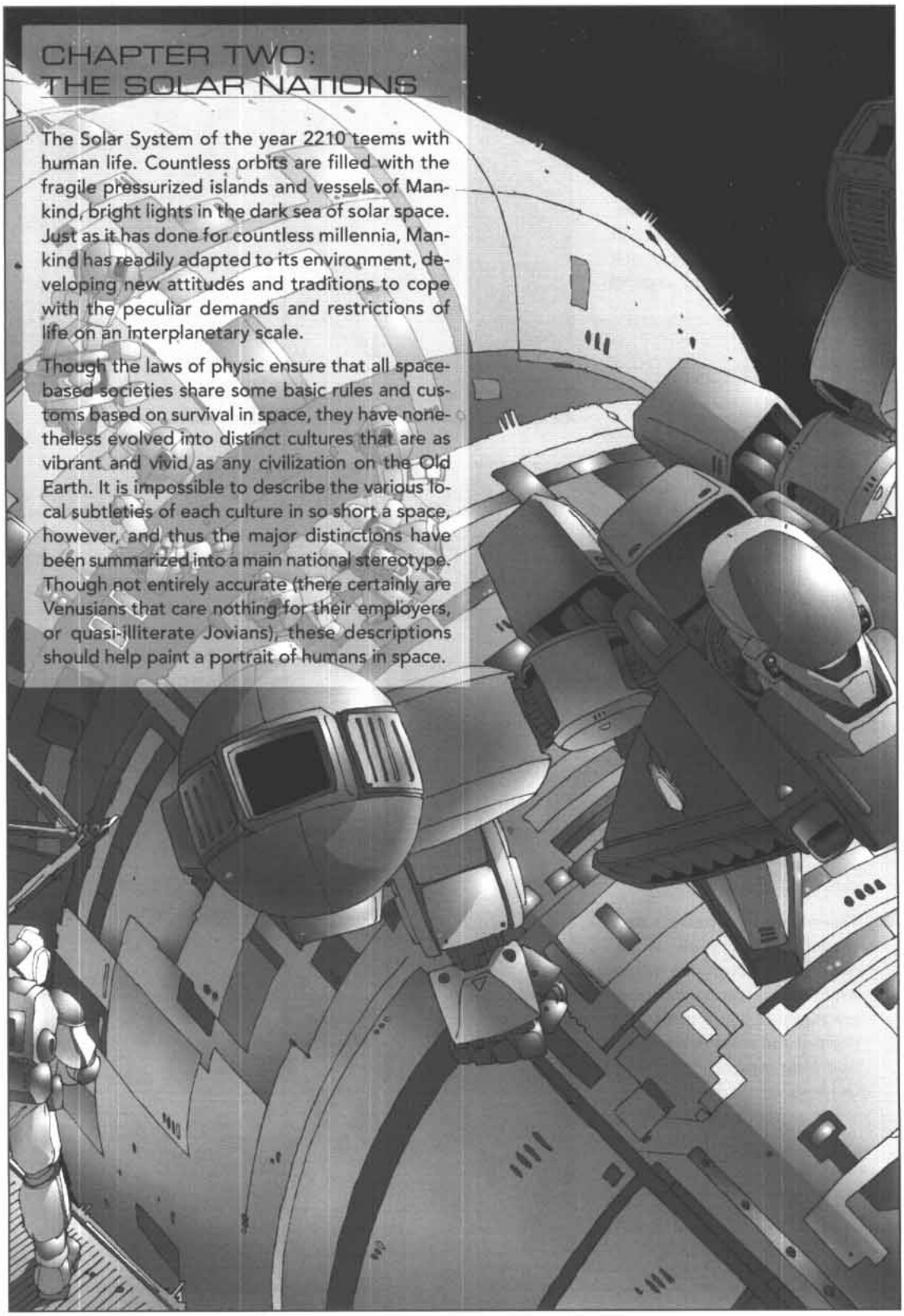


MIGHT

The nations of the solar system can call upon vast reserves of raw material and energy, allowing their engineers to craft truly remarkable pieces of machinery. No groups in the history of the human race has had access to so much unbridled power.

AMBITION

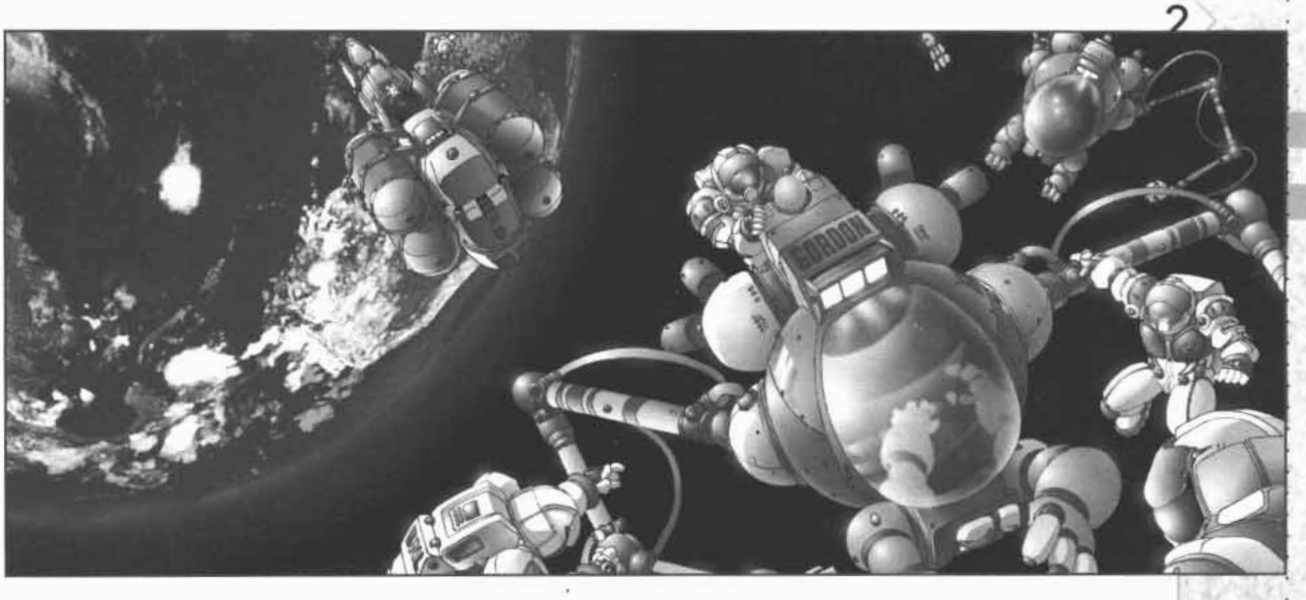
Those with vast powers and wealth usually seek to acquire even more. This is true when one looks at the governments of some of the nations of the solar system. Albeit their motivation differs, the end result is often the same — conflict and misery.



CHAPTER TWO: THE SOLAR NATIONS

The Solar System of the year 2210 teems with human life. Countless orbits are filled with the fragile pressurized islands and vessels of Mankind, bright lights in the dark sea of solar space. Just as it has done for countless millennia, Mankind has readily adapted to its environment, developing new attitudes and traditions to cope with the peculiar demands and restrictions of life on an interplanetary scale.

Though the laws of physic ensure that all space-based societies share some basic rules and customs based on survival in space, they have nonetheless evolved into distinct cultures that are as vibrant and vivid as any civilization on the Old Earth. It is impossible to describe the various local subtleties of each culture in so short a space, however, and thus the major distinctions have been summarized into a main national stereotype. Though not entirely accurate (there certainly are Venusians that care nothing for their employers, or quasi-illiterate Jovians), these descriptions should help paint a portrait of humans in space.



▶ SOLAR SYSTEM OVERVIEW

The events which have collectively come to be known as the Odyssey were a rude awakening for the disparate nations of the Sol system who had been comfortable in their isolation. The failed attack on Elysée by a rogue CEGA (Central Earth Government and Administration) battlefleet was an unmistakable sign that Earth's grasp was at last catching up to its scheming. Certainly no one now thinks that the slap on the wrist received at the Battle of Elysée will curb further such actions on the part of CEGA. Across the entire system, the human race prepares for a war that nobody wants to fight.

Nowhere is the tension greater than in the Jovian system. The weeks following the near-disaster of the Battle of Elysée have seen several arrests of high-ranking military personnel. Of the greatest public interest is the resignation and subsequent house arrest of General Avram Thorsen, who has confessed to the crime of collaborating with the CEGA forces. Even with the demoralizing removal of one of its finest leaders, the Jovian Armed Forces have risen admirably to the challenge of a stepped-up defensive posture by increasing patrols and training operations.

The situation on Earth curiously mirrors the state of Jovian affairs. While the deceased Admiral Russel Kleb, who led the attack on the Jovian Confederation, has borne most of the blame for the fiasco, there are some members of the CEGA council who refuse to let the matter rest and insist on witch-hunting other responsible parties. Military production in the Earth system, already at a high level, has been increased yet again, and recruitment rallies are taking place everywhere. Strategically, CEGA splits its focus between crushing the remaining resistance to CEGA rule on Earth and presenting a strong space-based military force with which to cow the human-settled worlds.

The rest of the solar system watches the two powers intently, as yet unwilling to declare sides. Mars is still split by bickering between its two nations, although the destruction of the orbital elevator has put the entire planet in an unsavory mood toward CEGA. The Mercurians and their Merchant Princes are wary of any event that might make business difficult, and are taking preventative action. Lastly, behind every wall in the solar system lurks the ears of the Venusian Bank, whose role in the politics of these dark times resembles an iceberg, far more massive and deadly than one would suspect at first glance.

For more than a century, the nations of the solar system lived in isolation, separated by the ocean of space. Mankind, however, has never been satisfied with what is readily available, preferring instead to range afar for new acquisitions. As a result, the injustices of past centuries will be repeated, this time on a much vaster scale. Only time will tell if the creatures who could not share a planet can learn to coexist in an infinity of stars.

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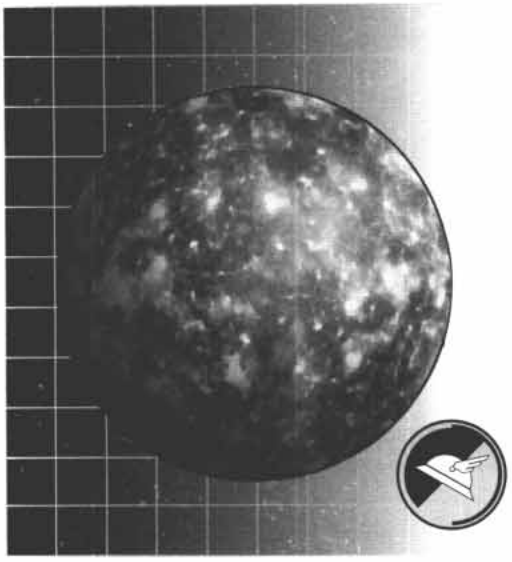
▶ MERCURY



MERCURY

Distance From Sun:	57,900,000 km
Revolution Around Sun:	88 days
Rotation:	58 days, 15 hours
Axial Tilt:	0°
Diameter:	4,878 km
Density:	5.4 x that of water
Mass:	3.3 x 10^{20} metric tons
Surface Gravity:	0.38 g
Escape Velocity:	4.18 km/sec.
Average Surface Temperature:	430° C on day side, -170° C on night side
Atmosphere:	Traces
Hydrographics:	None
Population of Planet:	Variable
Population of Orbital Stations (21):	29 million
Languages: English, Spacer's Runic, Merchant's Tongue	
Primary Exports: Industrial metals, uranium, labor force	
Primary Imports: Food, water, manufactured goods, fuel	

▼ OVERVIEW

Fewer than two dozen large stations orbit Mercury, hidden from the blazing solar radiation by the solar system hottest planet's shadow. First colonized for the New Earth project, the Mercurian nation has swelled in ranks in the early twenty-second century when it offered asylum to disgruntled Venusian salary men escaping from Venus' choking political climate. It has grown rapidly over the last century to become the most influential trading power in the solar system. By remaining carefully neutral in all conflicts involving other settlements, and by making sure not to pick any fights of its own, Mercury has gained the grudging trust of the other solar nations. The huge mag-sail barges of the Mercurian merchant fleet can be found in every corner of the solar system, ferrying all manner of goods between the planets, a constant reminder that the nation of Mercury extends far beyond the orbit of the innermost planet.

▼ CULTURE

The people who live in the shelter of Mercury's shadow are well aware of the precarious nature of their homeland. Although the Mercurians treasure the privacy afforded by their hostile environment, the close quarters and constant danger cause a great deal of internal stress on their society. As a result, nearly every Mercurian is subject to mandatory service in the merchant fleet, both to train young adults for the full responsibilities involved in living in space permanently and to make sure that everybody travels at least once in their lives. This policy also ensures that every Mercurian citizen develops a knack for business. When coupled with the natural hardiness and ingenuity brought on by their life on the edge, these traditions makes Mercury's small population a system-wide power totally out of proportion to its size, a fact not lost on the increasingly arrogant Mercurians.

◇ MEETING A MERCURIAN

Most Mercurians businessmen are generally outgoing and will not shy from talking to strangers. This is a good salesperson attitude and has undoubtedly contributed to the system-wide impression that Mercurians are smooth talkers. Among themselves, however, they tend to remain wary and alert until the time they feel they have a good handle on the newcomer's personality and motivations. This is an attitude strongly enforced by individual corporations which try to keep an edge over their competitors through extremely restrictive and severe non-disclosure agreements. There are few crimes that outrage Mercury citizens more than industrial or commercial spying.

Mercurians frown upon unnecessary risks, but quickness of thought and the ability to piece together effective and reliable plans are valuable assets. In the same line of thought, rash individuals are considered a liability and can quickly be

relegated to non-essential tasks in a peripheral area. Such individuals often spend weeks in their new positions until they have demonstrated that they deserve another chance. As a result, those who are truly talented and ambitious may eventually rise above their peers while those who are simply social parasites quickly find themselves with a decreasing number of opportunities for their futures.

Mercurians must by necessity spend a great deal of time close to one another, a problem which is compounded by a 2.5% birth rate. Over the decades, it has become natural for each member of a family to each have a "haven," a private place where no one else but that person can enter. These small rooms, often no bigger than a soundproof cubicle, serve as a personal sanctuaries where one can take refuge to meditate, read or simply take a nap away from prying eyes. Between their thirteenth and fifteenth birthday, Mercurian teenagers usually receive their own "haven" as a gift from their family, a sign that they have become independent members of Mercurian society. The haven can be within the family home if space is available, or in a haven building where such space can be bought or rented. Other Mercurians will be loathe to enter another person's haven except under dire need or in case of emergency. If a Mercurian is interrupted while in his haven without reason of sufficient importance, he will ask the offender to leave in a very polite but firm tone, regardless of the person's rank or relation to him. Regardless of the intruder's answer, the offense will never be forgotten, and may only be forgiven after a long time or an impressive effort to rebuild and strengthen the relationship between the individuals.

The lack on space is undoubtedly one of the main reasons why Mercurians favor the profession of space merchant. This is a perfect opportunity for them to move to larger quarters aboard spaceships and to be away from the prying eyes of their neighbors. Some particularly independent Mercurians worship space travel with an almost-religious fervor and dread the days they have to spend on Mercury with their so-called friends and families. On voyages, the personal quarters of a Mercurian are considered inviolate, and barring negligence in duty or a pressing need, Mercurians will leave others alone while in their cabins.

▼ POLITICS

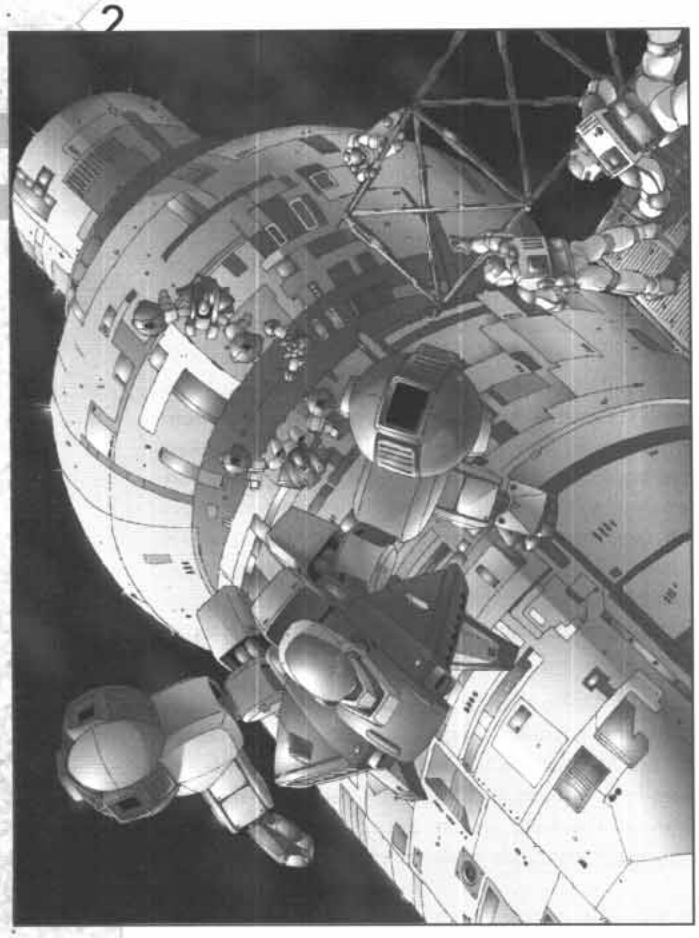
The Mercurians rely on a simple democratic government in which an Administrator is elected by popular vote and serves for up to ten Mercurian years. Candidates are required to announce their desire for the position at least five years in advance, to allow citizens ample time to evaluate them. This also allows far-flung merchant crews a chance to get the news. This makes for a constant pool of candidates who try to impress the Mercurian people with their efficiency and intelligence. Fortunately, the pragmatic Mercurians have little tolerance for non-business-related political posturing. The current Administrator, Golan Fairbanks, is an ex-Guild captain who was elected a year ago after a close race. His efforts to moderate Guild control of Mercurian society have earned him many enemies among his former colleagues, but his daring and progressive economic policies have earned him the love of the general populace.

Mercury is the neutral settlement of the solar system, and refuses to align itself with anyone. As far as the Mercurians are concerned, taking sides is bad for business and must be avoided. Other nations of the solar system accept this attitude because of Mercury's value as an impartial trader.

▼ SCIENCE AND MILITARY

By dint of their unique environment, Mercurians have become the masters of high-temperature-materials engineering and solar power applications. Almost all of the nation's power is supplied by huge solar energy arrays on Mercury's surface and in its near orbit.

Because there was so little to defend on or around the planet itself and since merchant ships and barges were unarmed by tradition, Mercury maintained only a token force of patrol-class military ships and fighters for many years. Recent events, however, have prompted Administrator Golan Fairbanks to beef up his nation's defenses as a precautionary measure. Foreigners stationed on Helios Station, Mercury's capital, have reported heavy activity at military facilities, and the swelling military has recently deployed the Brimstone exo-armor. For the moment, Mercurians maintain their position of careful neutrality, but only a fool would think that they are unprepared for a shift in the solar system's political structure.



▼ COMMERCE AND INDUSTRY

Having few exportable natural resources or manufactured goods, Mercury relies on its large merchant fleet to support itself. By facilitating the exchange of commodities between worlds, Mercury earns revenue for the expensive upkeep of its stations. Every ship and barge in the Mercurian merchant fleet bears the crest of the Merchant Guild on its hull (see *Mercurian Merchants Guild*, p. 64).

The Guild is an organization reminiscent of the guilds of Renaissance-era Earth. Membership in the Guild is limited to Mercurian citizens who have completed their National Service requirement, although not all Mercurians choose to become members. After leaving official service, Mercurians who desire neither the benefits nor responsibilities of Guild membership are still granted the right to travel as crew on Mercurian merchant vessels every few years to ease the burden of a life spent in confined living conditions.

◇ THE MERCHANTS OF MERCURY

Mercury has once been called the "Land of the Nomadic Merchant Princes," an amusing if somewhat inaccurate nickname. Contrary to popular belief, the entire population is not engaged in trade-related activities, though it is the major source of revenue for the tiny Mercurian state. Many people work in space construction to expand the available living space and ensure that the systems that protect the citizens against the harsh rays of the Sun are in perfect working order. Also, as with all large organizations, the Merchants' Guild requires a strong and reliable support structure, and employs a great number of specialists from such diverse fields as engineering, psychology, bio-chemistry, astronomy, entertainment, etc. Despite all this, the myth that all Mercurians are good merchants and space adventurers persists throughout the solar system, and everyone has learned to live with it. After all, this reputation carries with it some advantages, not the least of which is that aura of adventure and exoticism which members of the opposite sex found so attractive in the sailors of old. Merchants really don't mind. Most solar citizens find that reputation fascinating, and that gives Mercurians better sales openings.

▼ RECENT DEVELOPMENTS

True to its word, Mercury has remained neutral amid the increasing tension between the Jovian Confederation and CEGA. Undaunted by the prospect of all-out war, the Mercurian merchant fleet remains abroad, helping to keep the lines of trade and communication open between nations. Goods, people and information that cannot be delivered through national channels often find their way to their destinations aboard Mercurian ships.

The Merchant Guild pays close attention to the cargoes entrusted to its care, always on the lookout for information about the possible involvement of the Venusian Bank in the Odyssey crisis. Many Mercurians are descended from runaways disgusted with the policies of Venus and reminiscent of its ambitions. If that world is manipulating events once again, the Guild wants to be the first to know the details.

ON THE WINGS OF HERMES

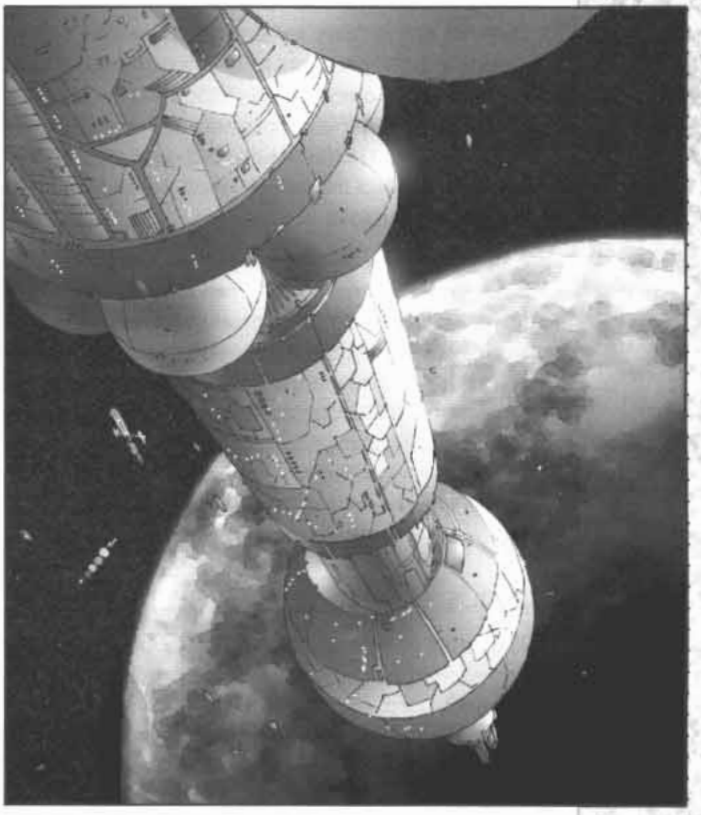
One of the basic choices a player must make about a Mercurian player character is whether he was raised aboard one of the space stations or under the surface of the low-gravity planet. This fundamental decision will affect the character's Build to a great extent. Mercurian player characters are merchants more often than not. Since they must all go through their mandatory fleet service, PCs should have a basic idea of how their service went, who they have met during that period, who they worked under, what they learned, etc. Playing a group of young Mercurians on their first trip can be a great premise for a campaign. It allows new players a chance to travel through the solar system, meet a wide variety of individuals, experience diverse cultures and get rich in the process. They may travel aboard their own spaceship — probably an old junker, refitted so many times that none of the original equipment is recognizable — carrying cargo, information or passengers without asking too many questions. Characters that are part of the Merchants Guild may be asked to transport questionable cargo or gather precious information, which may lead to several action-packed scenarios.

Non-Mercurian characters visiting Mercury's stations are likely to be closely watched. Mercurians value their privacy and do not want strangers sticking their noses in their businesses. Furthermore, visitors are often unused to the safety measures to follow aboard the stations or under the surface, and can easily be a risk to the settlement's safety. If non-Mercurian player characters visit Mercury, the Gamemaster can easily set up a scenario where they commit some form of security breach and have to survive it. Alternatively, they could become embroiled in some underground conflict between the Guild and the Venusian Bank, and have to weasel their way out without losing too many feathers.

THE SURFACE

The power relay stations on Mercury's surface are a remarkable example of Mercurian stubbornness and adaptability. The living quarters and transmission facilities are hidden beneath the ground for nearly three months at a time during Mercury's 600-Kelvin day while the collectors soak up the sun's power. The stations become a bustle of activity after sunset, when microwave transmission towers rise from armored silos to beam stored power to the stations above and technicians emerge to perform maintenance and repairs on the huge arrays.

While this system might seem needlessly dangerous, the founders of Mercury's society, fearing possible Venusian reprisals, decided that power satellites were too vulnerable to sabotage. While the surface stations cost more and are difficult to build and maintain, they are easier to protect than orbital relays. Only half of the total power system is exposed to attack at any given time.



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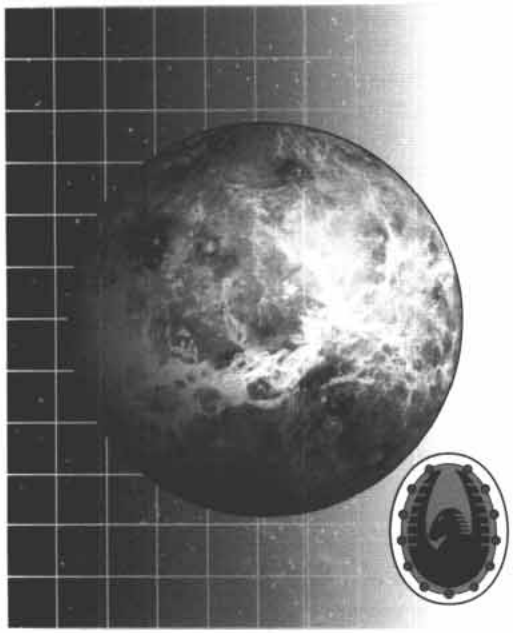
▶ VENUS



VENUS

Distance From Sun:	108,200,000 km
Revolution Around Sun:	225 days
Rotation:	243 days
Axial Tilt:	178°
Diameter:	12,100 km
Density:	5.3 x that of water
Mass:	4.8 x 10^{21} metric tons
Surface Gravity:	0.91 g
Escape Velocity:	10.3 km/sec.
Average Surface Temperature:	60° C at the poles after terraforming.
Atmosphere:	1.5 to 4 atm (42% carbon dioxide, 35% oxygen, 22% nitrogen, trace H_2O, H_2SO_4, HCl)
Hydrographics:	2.3%
Population of Planet:	410 million
Population of Orbital Stations:	7 million
Languages:	Venusian dialect, English, Japanese, Cantonese
Primary Exports:	Algae products, foodstuffs, commodities
Primary Imports:	Machinery, computers

▼ OVERVIEW

Venus has always been a world of mystery, its secrets of old hidden for centuries behind rolling clouds of poisonous gas and surface temperatures high enough to melt lead. Although Project New Earth converted the atmosphere with terraforming techniques late in the twenty-first century, the spirit of Venus' veiled threat has been passed on to its human inhabitants.

Project New Earth was sponsored, designed and paid for by a group of Terran corporations who foresaw the impending social chaos on Earth and decided that their positions were too weak to withstand the coming storm. They organized a mass emigration of resources to a new world, leaving the remaining cartels to squabble over what would soon be a wasteland. The wisdom of that decision has been borne out — the corporations of Venus are now the richest in the solar system.

▼ CULTURE

The cities of Venus are quite spacious despite the need for protective domes and processed atmospheres. Life within the domes is strictly regimented in order to preserve working efficiency and discourage rebellion. Most Venusian workers never see the outside world, cared for as they are from birth to death by their teammates, supervisors and company. All that is asked in return is hard work and ambition.

Venus' official language is a curious creolization of Japanese grammar and English words derived from a century of intermixing corporate systems. The written form uses Roman letters in conjunction with the three forms of written Japanese, and is widely regarded as the most difficult language in the solar system to learn. Venusian children are, of course, taught to treat this as just another rung on the power-ladder.

Most populations with rigid education and various communication networks tend not to change languages easily. In the case of the Venusians, however, the linguistic change was intentional, a deliberate effort to make the language inaccessible to those who did not learn it from birth. Most children on Venus are taught Japanese first, and then instructed in the reading and writing of the English languages. The alteration was sponsored by several major corporations who desired a more compact and versatile tongue. Many especially long or awkward Japanese words have been replaced with English, and vice-versa. While the space-based nations were developing Spacer's Runic for many of the same reasons, the Venusian government gradually instituted this new language, squashing the protests of traditionalists.

◇ HARD WORK AND BYZANTINE INTRIGUES

At the higher levels of society, the sharp and politically inclined Venusians are involved with mind games and power plays. The more general citizens are mainly concerned with their day-to-day lives, although politics are still unavoidable. Venusians have built almost a mystique about their political affiliations, something which affects almost every encounter they have. An informal system of social strata based on education and affiliation rules their behavior and interactions. For instance, upon meeting someone for the first time, a typical Venusian will attempt to establish the newcomer's social status, either through subtle inquiry or, in higher social levels, through observation and networking. Should the newcomer's social status be lower, the Venusian will remain polite but remote. If higher, he will remain humble and terse. It is considered impolite and clumsy to directly inquire about the other party's political influence. In some circles, such an approach is considered an affront, and particularly sensitive Venusians have been known to call off very lucrative deals because of a discourteous off-worlder's prying.

On Venus, ambition and hard work are valued, but not at any cost. Both men and women are encouraged to be the best at what they do, even if they occupy low-profile jobs or careers. Ambition and dedication set the limits to how far they can go; anyone with a minimum of talent who wishes to climb the social echelons and achieve greatness simply has to put the work into it.

The Venusian education system follows some rather unique premises and attempts to emulate it on other planets have always failed because of its cultural peculiarities. Students are not grouped by age but by abilities. At age five, all children are given a general ability test and put in Shiroi Gakkou (White School), somewhere in the first to fifth Dan depending on the results of the test. Whenever they are ready, they are tested to move up in ranks until they reach the highest rank within their School level. They then graduate to the next School at its lowest rank. It takes a normal student about a year to move up a Dan, although gifted pupils do it faster. The two Schools past Shiroi, Kiiroi and Orenji Gakkou (Yellow and Orange Schools) have only three Dans each. In general, no more than half the population graduates from Orenji Gakkou to move to college. The first college rank, Akai Daigaku (Red College), tests its students upon admission and ranks them from First to Fourth Dan; formal graduation occurs upon Sixth Dan for Venusians who want to become professionals or upon Ninth Dan for those who want to move on to the next college level, Kuroi Daigaku (Black College). The ranks within that college are not public knowledge and graduation only occurs when the students' mentors feel it is time. Those who graduate are sworn to secrecy about the college's teachings, which appear to be extremely varied and demanding, but in return are assigned positions of power within Venusian society.

Citizens are often cared from birth to death by the corporation that employs them. They live in subsidized housings, eat at company-sponsored restaurants and watch corporate-owned news network. While there is no shame in buying or using a competitor's products, most employees feel a loyalty to the company they work for and use its products whenever possible.

▼ POLITICS

Venusian society is based on the concept of the city-state. Each domed settlement is governed by the board of directors of the parent corporation that either built or owns the city. The specifics of administration vary from city-state to city-state, but the most common form of governing body is a small subcommittee under the direct control of the board. Dissatisfaction with corporate policies among the citizens moves up the chain of command by way of increasingly larger petitions. In rare cases, corporate CEOs have had to make rulings based on the signed complaints of entire city-states.

Venusian foreign affairs are mediated by the planetary council, a body of representatives sent from each major corporation. The number of councilors each corporation sends is based on the corporation's annual net worth. This rule is perpetuated by the Venusian Bank, whose true power is rumored to be many times what their already-large council delegation suggests (see *Venusian Bank*, p. 63).

2

◇ VENUS INCORPORATED

Venus is a settlement that is cloaked in conflict and power. The Byzantine intrigues of the leaders shape the destiny of the planet and every one of its citizens. With the Venusian Bank's interest extending to every person and corporation living on the planet, Venusians are never sure when they are being watched or tested by the corporations to which they owe so much. This constant pressure is, perhaps, the single most important factor which defines the Venusian character. From it stems the hardworking, stress-filled, devious Venusian stereotype that the rest of the solar system loves to hate and envy. Needless to say, such a life style has its rewards, and the quality of living on Venus surpasses that of every other society in the solar system. Regardless of the apparent advantages, however, all is not well with Venusians. A discreet and rebellious social movement has emerged during recent years. It is trying to encourage people to enjoy life rather than to spend it working for a corporation. This movement, however, has very little credibility with the hard-working citizens of Venus, who have a great deal of faith in their employers and understand that social wealth comes with a price tag.

▼ SCIENCE AND MILITARY

Venusian technologies are among the most advanced in the solar system; what their own R&D departments cannot develop can be bought or stolen from other sources. As a result, they have managed to engineer (or reverse-engineer) nearly every scientific innovation of the past century. The Venusians, however, are at just as mystified as the rest of the solar system by the workings of the Jovian Floater's multipolymerase protein (see *The Great Mystery*, p. 55).

The public face of the Venusian Home Defense Force (HDF) is a glorified parade band which performs air shows and barnstorming acts for the general populace. In reality, HDF pilots are experienced and well trained, and their exo-armors, exo-fighters and warships are the finest products of multiple Venusian military contractors. It is also suspected that the actual size of the HDF is far larger than everyone has been led to believe.

◇ VENUSIAN HOME DEFENSE FORCE (HDF)

The Venusian military was created by several large Japanese corporations which needed a small security force to patrol their new planet and the surrounding space. The new Home Defense Force was structured much like the Japanese military back on Earth, with the same ranks and language.

Although Venusian culture is no longer dominated by Japanese traditions, nobody saw any good reason to change a perfectly good military organization. The modern Venusian Home Defense Force retains its Japanese flavor.

Although the HDF is rather small compared to the CEGA or Jovian militaries, it is still a force to be reckoned with. Its troops are very highly trained, and the quality of their equipment is top-notch. Exo-weapon technology is widely used. Several corporations have spent a great deal of money to ensure that Venusian exo-armors are far superior to anything else in the solar system. The true capabilities of Venusian exo-armors are unknown, however, as is the true size of the HDF itself, since the Venusians refuse to allow anyone more than a cursory view of their military.

The standard organization of the Home Defense Force is centered around the Flight, which is composed of four machines of the same type. These can be exo-technology vehicles, conventional space fighters or armored vehicles (although there are very few of these). Squadrons are made up of three Flights, each commanded by a Tai-I. Squadrons are assigned to a ship or base, and are commanded by a Tai-sa. Infantry are often equipped with exo-suits, and are grouped into squads of eight and platoons of twenty-four.

▼ COMMERCE AND INDUSTRY

The regular importation of foreign electronics and machinery to Venus is an illusion designed to fool the rest of the solar system into thinking that Venus cannot survive without their help. The sham gives Venusian traders an edge when dealing with other nations. Many a foreign corporate representative has been duped into thinking that Venus would get the short end of a deal. In recent years, Venus has used such skillful deception to make itself the solar system's money clearinghouse. Several large banks on Venus are gaining an economic ascendancy, of which the Venusian Bank is the biggest and best known. This situation has generated a great deal of resentment among the governments of other worlds. Mercury, for instance, roundly dislikes having any part of its revenue touched by its former major shareholder.

▼RECENT DEVELOPMENTS

Throughout the years, Venus has successfully downplayed its ties to CEGA, promoting an image of neutrality and openness. Doubt is surfacing, however, in the minds of many political insiders system-wide in the wake of CEGA's recent actions, despite a typically prompt and efficient Venusian media blitz distancing Venus from the Odyssey.

Locally, recent events have heightened the already-existing tensions between the Venusian Bank and other corporations who resent the Bank's near-total control of the planetary council and Venusian financial activities as a whole. Non Bank-affiliated economists voice concerns about a downward spiral toward a planet-wide monopoly by the Bank. Bank officials deny these allegations, and point out the increasing wealth of the accusing companies and the difficulty of establishing a monopoly in such a competitive environment as Venus.

TERRAFORMING

The conversion of Venus from a corrosive hellhole to a tolerable environment for Humanity began on Mercury, where a series of automated massdrivers spent more than three decades seeding Venus with magnesium and calcium bricks which were then made to react with the carbon dioxide in the atmosphere to free oxygen and bind carbon to the surface. Giant fin-like structures, acting as heat sinks, cooled the polar ground for the Venusian arcologies. Now that the atmosphere has thinned noticeably, Martian-designed, genetically engineered bacteria are slowly perpetuating the process of atmospheric conversion. One day, ice asteroids will be dropped from orbit to bring water to the Venusian seas.

The result is no earth-like paradise, but at least the temperature range at the polar regions is somewhat acceptable to humans. The atmosphere remains dangerous to breathe, and Venus' lack of a magnetic field means that the plasma bow shock of the solar wind is practically overhead, but the Venusians are happy with their small triumph. Theoretical plans for a planetary-scale screen are in the works to reduce radiation on the surface.

PLANET OF MYSTERY

Player characters from a Venusian background can be part of the content or discontent segment of the population. This usually corresponds respectively to the richer capitalists or the outcasts. Those from the first group tend to be sharp, well educated and politically inclined. The outcasts, while not always rebellious, tend to come from poorer backgrounds and often look for ways to change the system. Players can be from either one. Depending on that choice, their goal may be to further the interests of Venus in the solar system or to promote changes within their society to make room for the "lower" social castes. In the first case, PCs may work for a given city-state or for the Venusian Bank, going on missions that may take them throughout the solar system in order to find new sources of revenue or power. Those player characters who belong to the outcasts may join some internal underground movement working against the strictly regimented environment or try to find some way to leave the planet and find a better future in space.

When players visit Venus, they should be careful to tread lightly and keep their heads above water. Venusians do not want anyone finding out what they are up to, so they act with a great deal of efficiency against nosy visitors. Sometimes, they also act that way with guests before they have a chance to be nosy.

2

▶ EARTH

◫ EARTH

Distance From Sun:	149,600,000 km
Revolution Around Sun:	365.25 days
Rotation:	23.93 hours
Axial Tilt:	23.5°
Diameter:	12,756 km
Density:	5.5 x that of water
Mass:	6 x 10^{21} metric tons
Surface Gravity:	1 g
Escape Velocity:	11.27 km/sec.
Average Surface Temperature:	18° C
Atmosphere:	1 atm (78% nitrogen, 20.5% oxygen, 1% carbon dioxide, 0.5% pollutants)
Hydrographics:	72 %
Population:	4.2 billion
Languages:	English, Chinese, Spanish, countless others
Primary Exports:	Art, resources, labor force
Primary Imports:	Manufactured goods, specialized food stuffs

▼ OVERVIEW

In the late twenty-first century, a series of social and economic disasters brought the civilization of Earth to its knees. The causes of the Fall are still debated today, with no clear answer in the offing. The fragmentary records of the time signal a worldwide computer network blackout, followed by stock market crashes and mass economic confusion. There is also evidence of a plague that struck down millions in the months of darkness that ensued.

Nothing from that time is certain; all that is known by the other planets is that all contact with Earth was suddenly lost, and none of the shuttles sent to investigate the situation ever returned. In later decades, telescopes showed massive ecological devastation caused by neutron bombs and uncontrolled biological warfare, while intercepted radio transmissions told of terrible atrocities and barbarism. The colonies were struck by the realization that they were now on their own. They adjusted their internal structure and spent the next half-century struggling to become self-sufficient.

When Earth re-established communication in 2184, no one expected to see a powerful, unified government like the Central Earth Government and Administration. Although nearly half the planet was still in a state of civil war, CEGA moved quickly to regain control of the orbital colonies and the Moon, and declared itself as a new superpower in the solar system. Unwilling (or unable) to face down CEGA in its own backyard, the other planets allowed CEGA to do as it wished, much to their current dismay.

Earth, as it has ever been, is a fragmented world, its people a constellation of cultures and traditions. While CEGA is the power that now rules the Earth and its surroundings, nations in the middle-east, Africa and Asia all maintain independence from their imperialist neighbor. Though there is no longer a state of war between CEGA and its Earthbound neighbors, small skirmishes break out on a regular basis between the parties involved. Any who travel on the surface of the planet are advised to stay well within the borders of the particular nation that they are visiting, lest they become entangled in the heated international politics. Travelers should also be on the look out for terrorist or guerrilla activity wherever they are, and steer clear of anyone who would like to get them involved in their disputes. Despite the conflict that raged among the nations of the Earth in the past two centuries (or perhaps because of it) the Earth remains the most culturally diverse human world in the system. The myriad of smaller nations on the surface, the CEGA-affiliated territories, the Orbitals and the moon each have a distinct culture, and there are often subtle cultural differences within these larger groupings.

▼ CULTURE

As the natural birthplace of humanity, Earth remains a fabulous mosaic of cultures, religions and languages. A century of warfare has only reinforced the bonds within societies, keeping old languages and traditions alive. Many of those same traditions have been abandoned for the sake of uniformity and survival on other worlds.

In modern times, Earth has become the artistic if not the political capital of the solar system. Every day, merchant vessels laden with shiploads of scenic paintings, religious artifacts and holo-video discs leave the cradle of humanity for the other planets who eagerly trade their best goods for a glimpse of their past. Along with the presence of the ancient monuments and holy places, this makes Earth the envy of the solar system, at least artistically.

In other matters, however, Earthlings are arrogant and condescending. The popular perception of off-worlders is of country yokels who could only benefit from Earth rule. Even in the Middle-East and Asia, where war persists and CEGA rule is nonexistent, this belief generally holds true. Off-world visitors are seldom well treated away from diplomatic consulates. Although the common language of diplomacy in the solar system is English (a leftover from the days of North American aerospace supremacy, during which most official in-flight communications used English terminology), Earthlings who can do so often prefer to belittle their visitors by speaking tongues used only on Earth, like Mandarin Chinese or Spanish.

◇ THE PEOPLE OF EARTH

Despite the immense diversity that exists among the people of Earth, most of the inhabitants of other settlements in the system have come to associate the CEGA culture with the Earth. National stereotypes, however, can hardly be applied to the entire territories administered by the CEGA, since its typical citizens vary from one culture to the other. Nonetheless, a few specific trends have emerged and are common to most regions.

Terrans are somewhat arrogant and condescending as a whole. They share a general philosophy of superiority born from living in the cradle of Mankind. Despite their mismanagement of the planet's resources, they take great pride in their autonomy and history, claiming that none of the off-world colonies' cultures can hope to compare with countless centuries of civilization on Earth. To many, however, it is readily apparent that this arrogance conceals unease at their present living conditions and masks a deep-seated fear and envy of the space settlements' wealth. Most Earth citizens privately mourn the downfall of their planet, feeling that they've lost their privileged stature of pedestal of humanity.

The average CEGA citizen is generally poor, unless he belongs to the privileged caste that organized and controlled the Unification Wars. Military service is valued and respected, with the highest prestige being associated with officer status. In regions where the fighting was fierce, soldiers are often viewed with suspicion and mild hostility by the populace. Many of the old cities were damaged or destroyed through fighting or urban decay brought about by poverty and lack of care in the centuries between the Industrial Revolution and the present. Arcologies, some dating back to the early twenty-first century, attempt to provide people with decent (if cramped) living space that is efficiently organized and highly ergonomic. They have an overall higher quality of life than cities and are generally more open to off-worlders, to which they are regularly exposed.

Education is often a matter of luck, political connections or above-average wealth. Universities are mostly restricted to arcologies and Earth's illiteracy rate hovers just above 85%. Outside the arcologies, teachers wander from village to village, providing some basic education to the people who ask for it.

▼ POLITICS

The Central Earth Government and Administration is an archetypal imperialist government. Dissatisfied with ruling the local subsystem, it aims to regain control over the various human settlements of the solar system which became self-sufficient by necessity during Earth's isolation. Citing heritage, and the fact that a century ago Earth paid dearly to establish the settlements, they apply constant pressure on the other world governments of the United Solar Nations to surrender more and more control of their worlds to CEGA council. Thus far, these demands have fallen on deaf ears.

Forty councilors drawn from Earth, the Orbitals and the Moon make up the CEGA council. Although anyone may run for a position on the Council, the election process is strongly biased due to CEGA's roots in the military government that preceded it. Since CEGA is, according to its constitution, a supranational organization "divided by rebel influences," election votes from military personnel are weighed first, with the civilian votes serving only as tie-breakers. This much-decried policy has resulted in a pro-military and pro-imperialist council. The current head of the Council, charged with maintaining order during council meetings, is Aelfred Cyning, who has held the position for three years. Although he is an avowed expansionist, he has been quite impartial within the Council, allowing every faction to have its say.

Despite the constant badgering, Earth tries to maintain cordial relations with the rest of the solar system. Unfortunately for Earth, every planet has some reason to be wary of this hand of friendship. All Martians (even those in the Martian Federation, which is nominally allied with CEGA) are taught at an early age the history of their world's battle for independence against Earth. Mercurians are concerned that CEGA's goals preclude the existence of a neutral trading power like themselves. While the Venusian Bank (and by extension, Venus itself) is pulling the strings of many members of the CEGA council, the events of the Odyssey Affair have aroused fears that their puppet may be developing a mind of its own. The unprovoked attack against the capital of the Jovian Confederation has engendered open hatred of CEGA among the populace of that remote nation. Although many voices on both sides advocate a peaceful resolution of the differences between Jupiter and Earth, diplomatic relations between the two nations have chilled significantly.

◇ THE NON-ALIGNED STATES

The ad-hoc world government that created CEGA may have successfully united much of the population of planet Earth, but not all countries were ready to yield to its authority. The Non-Aligned States, as the territories that share the Earth with CEGA are referred to, are composed of three main power blocks, all relatively stable. The Asian Trading Sphere is the largest of them. It is composed of an uneasy alliance between China, Japan, eastern Siberia and the remnants of other Asian countries and what used to be Indonesia.

The South American continent is independent of CEGA but retains extensive trade relations with it. The greater part of Africa forms the third faction. Frontiers and borders established long ago by colonial powers have broken down, and most of western and central Africa is now composed of balkanized mini-states grouped in tribal and regional alliances. Rumors of an African diplomatic treaty with the Jovian Confederation are currently running through the halls of power, as are stories of a planned military response by CEGA.

There is little doubt in the mind of political observers that the powers-that-be in the CEGA council will want to "tidy up" their own backyard at some point, and place increased pressure on the other Terran states. This will force the nations to join up or at the very least ally themselves with the government juggernaut — the consequences of independence could be dire indeed.

IGNATIUS CHANG

Born amid war and political strife in Chinese-controlled Singapore in 2153, Ignatius Chang's family forced him into combat at an early age. He taught himself the meaning of honor, always making sure to treat his enemies with respect and humanity. His quick mind and natural charisma propelled him through the ranks quickly, and he became a general in the Chinese Army in 2181. His leadership helped China stalemate the North American/European forces, prompting the resumption of official peace talks.

After a formal peace treaty was signed, Chang found that he had become a well-known and highly-respected figure in the military ranks of his former enemies. When CEGA was formed in 2184 (without the membership of the Asian nations, who had demanded independence as part of the peace treaty), Chang realized the threat posed to his home country by the new regime. Hoping to spare his people unnecessary suffering by moderating CEGA's imperialism, he joined the CEGA Armed Forces and won a place on the organization's council in 2196. Although his actions have made him an exile among his own people, he has managed to persuade his colleagues to use nonmilitary means to bring peace to the Asian continent. He was a staunch friend of Ranho Garand, the CEGA ace who was killed during the Odyssey Affair, and is now one of the loudest voices in the faction that advocates a peaceful path to CEGA domination.

▼SCIENCE AND MILITARY

Much of CEGA's technology was developed by the Moon and orbital colonies during the Isolation. It is fairly advanced, but still a little behind Jovian or Venusian equivalents. Distrust of CEGA has prevented a free flow of knowledge, and CEGA spies have proven themselves to be less adept at "information retrieval" than Venusian ones. Nevertheless, Earth has made the best of what it has and has managed to make life reasonably comfortable for most of its population — a significant feat considering the size of Earth's population in relation to the other planets.

Earth's biosphere is slowly recovering. Until it does, CEGA has built huge, self-sufficient arcologies to house its people. The largest of these is Gaia City, built on the charred remains of the Boston Metroplex in North America. Serving as the home of the CEGA council, the massive complex rises over 500 meters high and sprawls over hundreds of square kilometers — a grand tribute to the monolithic power CEGA covets.

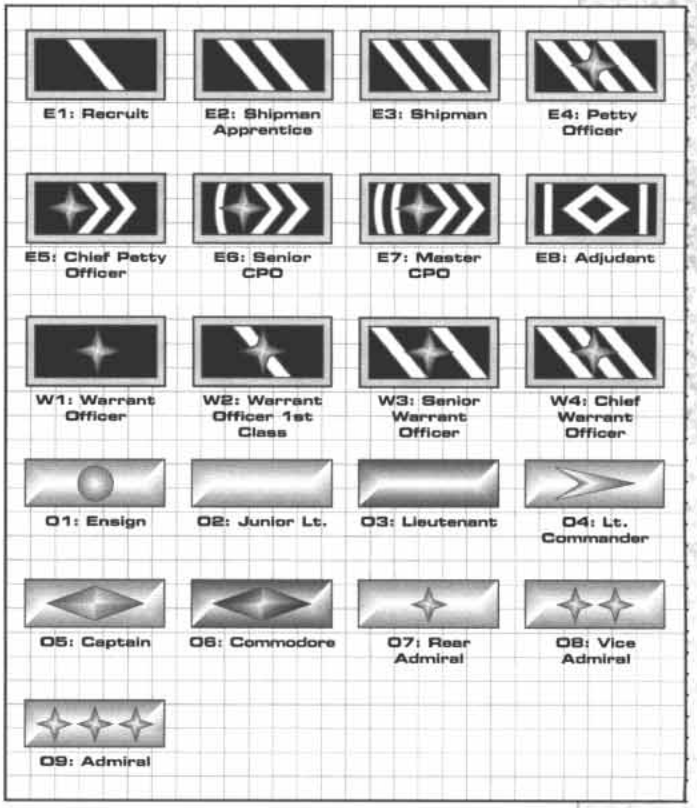
Much of CEGA's impressive work force is assigned to military projects, from basic research to mass production. CEGA's primary focus was, until recently, the construction of warships, a somewhat outdated attitude that nevertheless produced a fearsome space navy. The last few years, however, have seen a growing interest in exo-armor technology, culminating in the hideously expensive and technologically innovative Dragonstriker project. Considering the size of CEGA's navy, many foreign intelligence analysts dread the day when CEGA focuses all of its attention on exo-weapon development.

◇CEGA NAVAL FORCES

The Navy is the more powerful of the two parts of CEGA's military forces, both politically and technologically. The Navy has Council-granted priority over the Army, which allows it to requisition any personnel or equipment from the Army without explanation and with very little advance notice. This power is rarely used, since the Navy is well funded enough to recruit its own personnel and buy whatever equipment it needs.

The Navy's organization is centered around its vessels, since it is meant to be a solar system-wide mobile battle force, although space fighters and exo-armors also play a major part in the Navy's Table of Organization and Equipment (TO&E). It is divided into six fleets, each of which is independent of the others, with its own support division and administration. Each fleet is commanded by an admiral who directs operations from a Poseidon-class battleship-carrier.

Fleets One through Three are escort fleets, with a large complement of fast frigates, destroyers and light carriers. They patrol international space to maintain a visible CEGA presence in the solar system. The remaining three fleets are the main war fleets, to which the Navy's battle carriers and assault ships are assigned. Fleets Four through Six have been assigned to the Earth system since their creation, and are the subject of much foreign observation. Each fleet is home to an ever-increasing number of fighter and exo-armor squadrons, a sign that the Navy is shifting focus away from planetary bombardment and toward neutralization of specific enemy resources. Squadrons are divided into Wings, which are made up of Flights of four to six vehicles.



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◇ CEGA ARMY

CEGA's Army is charged with maintaining peace on Earth (and, should the occasion arise, other planets). Its main unit is the regiment, each of which is commanded by a colonel. The base unit of the regiment is the platoon, which always contains units of the same type in order to facilitate maintenance and resupply. Four vehicles or approximately thirty-two men make up a platoon.

The CEGA Air Force and water-bound Navy are branches of the Army. Their organization somewhat differs from that of the main Army but like the Army has descended from twentieth-century Euro-American military doctrine. Squadrons are used in the Air Force, while the wet Navy is divided into battle groups and task forces. The availability of orbital surveillance assets and fast deployment sub-orbital transports have reduced the usefulness of the wet Navy, leaving it to perform mostly logistic support and minor operations.

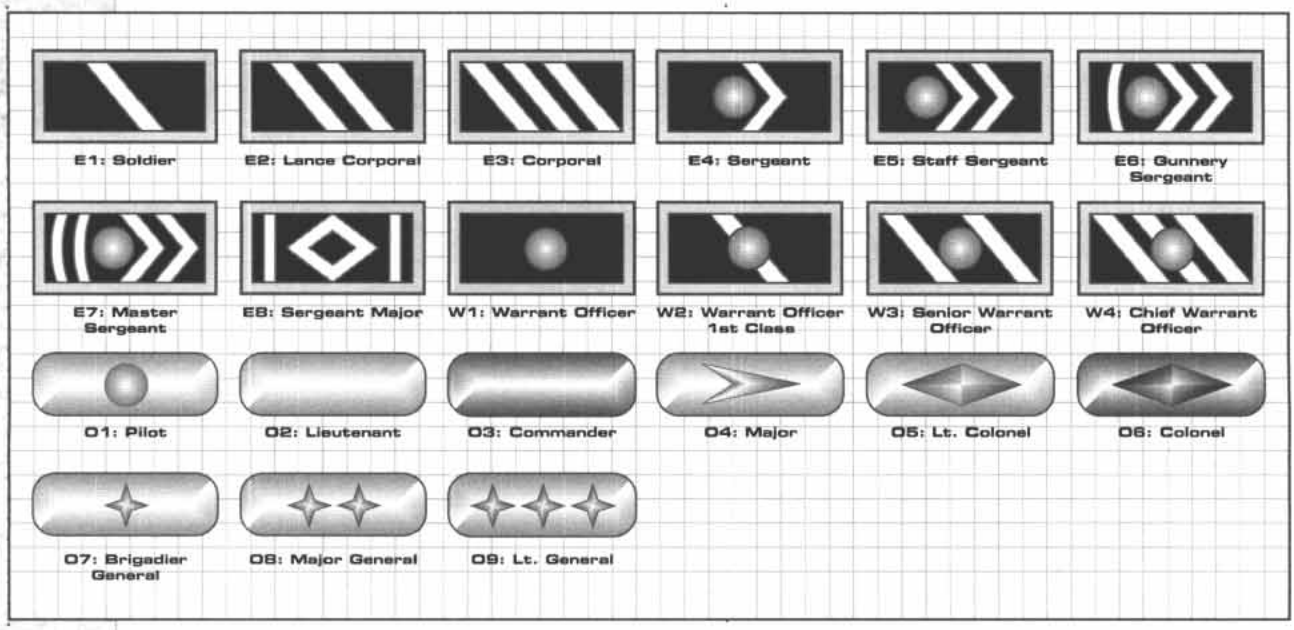
Because of the Army's paucity of funding, and the Earth's incomparably varied terrain, the Army makes use of outdated equipment that it would rather scrap. Almost all of the Army's new vehicles using exo-technology are modified versions of the Navy's Wyvern, but the CEGA Council has recently approved the development of smaller, more agile models for use only on Earth. This decision is in response to the Council's unwillingness to use orbital bombardment to coerce the Independent States to join CEGA, leaving the Army to find a less environmentally damaging (but equally grandiose) method of subduing the states.

▼ COMMERCE AND INDUSTRY

The companies that fled to the Orbitals in the days before the Fall returned home to find their assets in ruins. Unable to recover the past, they took advantage of early diplomatic initiatives by CEGA among the solar nations to snatch up technology, real estate and other commodities. In the short time it took the solar system to wisen up to Earth's true attitudes, these companies have regained a significant measure of their former glory along with a healthy amount of Earth-centric arrogance.

The Terran companies continue to demand special treatment, prime mining spots and other concessions from their "inferiors." This has led to several conflicts on Mars and in the Belt, where the settlers refuse to give ground on their home soil. These turf battles have mostly consisted of shouting matches and the occasional brawl, but it is only a matter of time before the Earthlings raise the stakes.

With its half-poisoned biosphere, Earth must import food, minerals and Martian terraform technicians to help heal the planet. The Terrans dislike their dependence on the other worlds and are often unreasonably hard nosed when negotiating prices, a behavior the rest of the solar system



would find amusing if Earth's attitude was not backed by an all-too-eager military fist. Many also suspect Earth of paying various mercenaries and pirates to steal goods in order to avoid fattening the coffers of nations they still consider colonies.

Pollution is now much less of a problem than it was in the past with most heavy industries now in space, where it is easier to dispose of and recycle wastes. However, the rarity of certain chemical compounds in space means that not all factories can migrate outside the gravity well, remaining on the land surrounding the cities and spaceports.

▼RECENT DEVELOPMENTS

CEGA is still recovering from the repercussions of the Odyssey Affair. Several high-ranking administration officials have been arrested and are scheduled for trial, and Admiral Kleb, leader of the invasion fleet, has been posthumously vilified. Most people, however, including some CEGA councilors find these "sacrificial lambs" unsatisfactory and demand further investigations into the matter. One of the most vocal of these has been Councilor Ignatius Chang, who currently performs his duties from a hospital bed while recovering from an "accident" that occurred shortly after he presented controversial evidence pertaining to Admiral Kleb's conduct at a press conference. He claimed that Kleb had been given judgment-impairing drugs, as part of a conspiracy within CEGA, shortly before the fleet departed for Jupiter. In any case, CEGA's already tenuous credibility as a peaceful neighbor has been totally shattered.

In an effort to redirect the public eye away from deranged CEGA admirals, Earth administration has launched a massive media campaign to blame the revolutionary group STRIKE for the destruction of both the Martian orbital elevator prototype and the massacre at Copernicus Dome on the Moon. In widely distributed propaganda material, CEGA does its best to dispel the public perception of STRIKE as a kind-hearted group of freedom fighters and recast it as a sinister organization of brutal terrorists.

CEGA council meetings are becoming increasingly heated affairs, even escalating to (on two separate occasions) fisticuffs. The moderate faction, composed mostly of Orbital and Lunar representatives, advocates peaceful negotiations with the other worlds and regards the promotion of military force as abhorrent, not to mention potentially suicidal.

The non-aligned nations of Earth have remained surprisingly silent on the whole affair, unwilling to face diplomatic problems by embarrassing the world government even more.

BIRTHPLACE OF MANKIND

Playing an Earth native provides you with the advantage of familiarity. It is easy to find documentation and story ideas based on currently available information. It should be noted, however, that Earth has changed quite a bit since the twentieth century, and that while countries still exist, they have fairly different spheres of influence and cultures. Most importantly, there are three options for player characters: they can be pro-CEGA, anti-CEGA or neither. Pro-CEGA characters may enroll in the military and help support the war effort, or they may become traders. Many people join the CEGA Naval Forces in order to see space and veterans can sometimes find the resources to relocate to the Orbital Colonies. Anti-CEGA PCs may work at home as terrorists, or seek allies in the various off-Earth settlements. They may also join STRIKE (see p. 71) and actively work against CEGA, but still to promote Earth's domination of the solar system. Neutral characters may simply set out to resolve the political problems on Earth, or simply make the best of an imperfect world. Mostly, they will not have an easy access to space and will focus their efforts on the planet and their personal lives.

There are several problems that need addressing on Earth, not the least of which is the amount of conflicts that rage over territory and limited resources. Strife is rampant, and belie the illusion that CEGA is all-powerful. Many of the treaties that are signed are broken and new ones are signed on a monthly basis. Earth's political scene is chaotic to the extreme. Player characters will have their work cut out for themselves if they attempt to work for one military force or the other. In some cases, some PCs may opt to join a party they are opposed to and work their way up to change it from the inside.

Earth is not entirely a hellhole. It is only there that PCs can feel real wind and rain on their skins, or wake to the warmth of the sun. GMs should emphasize the wonder of these simple pleasures to those who have spent their whole lives in the thin and cold air of Mars or cooped up in a cylinder colony.

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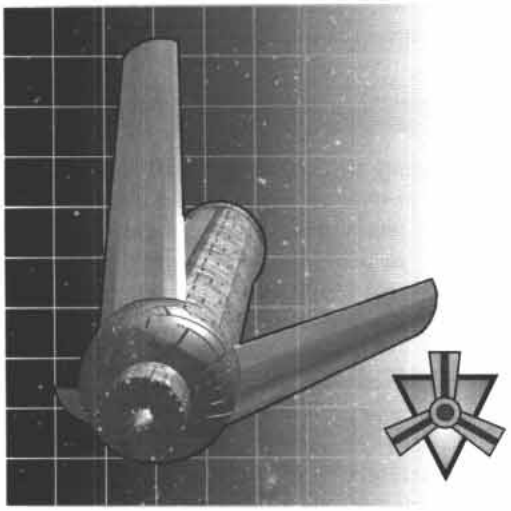
▶ ORBITALS



ORBITAL SETTLEMENTS

Distance From Earth:	300 to 426,000 km
Revolution around Earth:	Variable
Rotation:	Variable; 24-hour days
Axial Tilt:	N/A
Diameter:	Between 0.02 and 6 km
Length:	Between 0.3 and 40 km
Mass:	10 to $4x10^8$ metric tons
Internal Gravity:	0 to 1 g
Escape Velocity:	Variable, but always very low
Average Internal Temperature:	18° C
Atmosphere:	0.5 atm (55% nitrogen, 40% oxygen, traces)
Hydrographics:	None to 30%
Population:	480 million
Languages:	English, Spacer's Runic
Primary Exports:	Manufactured goods, labor force
Primary Imports:	Resources, specialized food stuffs

▼ OVERVIEW

The space societies of the Earth system are commonly known simply as the Orbitals. The name includes all space settlements, beginning with the transfer stations and workshops of low orbit to the colony and autofactory clusters at the various Lagrange points. They are home to millions of people, many of whom are descendants of refugees from the collapse of Earth. As the global economy slowly disintegrated, many corporations and academic interests fled to the space stations, followed in 2081 by the provisional Terran government. After they lost regular contact with Earth, the colonies were forced to become mostly self-sufficient. The difficulty of this task barred them from paying any attention to the deteriorating planet below for nearly a century.

The Orbitals, well aware of their vulnerability and lack of resources, established good relations with the Moon (which was in the same situation). Together, they survived and even prospered until the Central Earth Government and Administration rose from the ruins of Earth.

▼ CULTURE

Nearly every cylinder or torus has its own Earth-derived culture and traditions, making orbital society an earthly melting pot. Several stations are directly owned by the Terran corporations who had the good sense to flee Earth before the Fall. Many of these companies have also taken over administration of "orphan" colonies whose sponsors were wiped out, ensuring that maintenance and basic services are supplied.

In general, the stations are adjusted to follow the same seasons and day-night cycles as the country where most of its inhabitants originate. This has given rise to a sort of "weather tourism," where people take the inexpensive station-to-station mass transit system to spend a few hours in a different climate or time zone. As a result, most Orbitals think of the weather as a commodity rather than something to be endured. Frequent visits to other cylinders have also given a more open-minded attitude to the majority of the spacers, among whom racism and discrimination are rare.

The average Orbital citizen is often soft-spoken and easy to get along with. Life in the orbital colonies is somewhat slower, less frantic than elsewhere. The Orbitals don't have fast cars, but they have a wealth of resources and generally enjoy good living conditions. This is one of the main reasons why the CEGA benefit from a high level of support: they help to protect the Orbitals' sheltered way of life.

Most of the Orbitals work in the manufacturing or service industries. Those in manufacturing have a good knowledge of computer and technology to maintain and repair the machines that do most of the actual work. This is long and solitary work, and to compensate, they are fond of social gatherings, often in a sport context.

Outside of work, Orbitals enjoy arts and entertainment, most of which are imported from Earth below. This exposes them to CEGA propaganda and ideology, but no one seems to mind. They are sufficiently removed from the troubles of Earth to ignore most of it and take only what is pleasing or useful. One fashion that has recently emerged is the colorful bald-and-bandana look that is the latest fad from the arcologies of Reykjavik, world center of fashion and style. Orbital tourists are often recognized by their flashy outfits, which are in sharp contrast to their otherwise self-effaced manners.

▼ POLITICS

The Orbitals are willing and respected members of CEGA, although the peaceful views of their councilors (a result of living a lifetime in such a precarious position) are often at odds with the Earth-born members of the CEGA council. The Orbitals govern themselves through a council made up of representatives from each station, although some stations prefer not to be involved in foreign politics. Horangi Seung, a businessman-turned-politician hailing from Pyrea, is the Orbital council's current chairperson.

Seung, by virtue of his career background, is a no-nonsense person. His primary concern is establishing policies that will benefit industries and orbital corporations, and he has little time or patience for intrigues and mind games for the sake of power. In his mind, power and influence can always be bought if required.

The difference in outlook between Orbital and Terran members of the CEGA council is generally traced to the spatial settlements' more traditional civilian electoral process. Military personnel are not granted any special voting privileges in Orbital districts. As the number of CEGA Naval personnel steadily rises in the settlements, however, pressure is beginning to rise for military voters to receive a greater sway. These arguments have been given additional weight by a recent increase in STRIKE activities in Earth orbit, bringing CEGA's "rebel influences" charter into play. Orbital Chairman Horangi Seung has thus far held back any undesirable "reforms" of the electoral system, but has had to grant several concessions to the military to keep them mollified.

▼ SCIENCE & MILITARY

Orbital science is oriented toward space life. Their advances in life support and ship design and construction have proven invaluable to CEGA's military buildup, especially the Navy. Much of CEGA's space-faring forces are imported from the Orbitals in exchange for raw materials unavailable in near-Earth space.

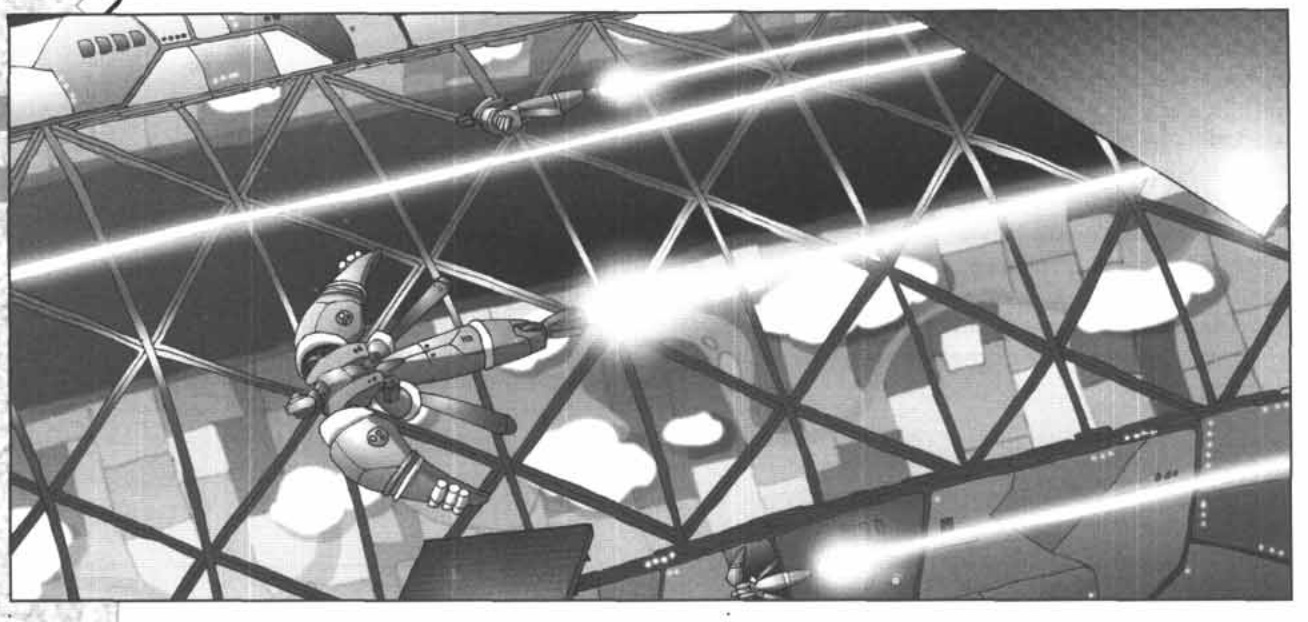
The Orbitals never felt a need to over arm themselves. Apart from shuttles and armed Orbital Transfer Vehicles, the forces of the space colonies consisted of little more than a few corvettes and launches, most of them used as custom ships to inspect cargoes coming in from the Moon or the Belt. When CEGA took over, many of these capable vessels were incorporated in the fleets of its Navy.

ISLANDS IN THE SKY

Player characters from the Orbital Settlements can come from a variety of backgrounds. The O'Neill cylinders have a reputation as idyllic, perfectly manicured environments and PCs can easily have grown up in cylinders resembling thirty-kilometer long suburbs. Other cylinders, however, have suffered from overpopulation and have seen slums grow up in certain areas. The colonies are home to ZONet (see p. 70) and other major media networks, making them a good "home base" for a reporter or entertainer player character.

Gamemasters setting scenarios in the Orbital Settlements can indulge in games of intrigue and subtlety. Orbitals live in a heavily corporate culture and espionage is almost second nature to them. CEGA's reliance on technologies developed in the settlements has only increased the stakes of intrigue. The presence of the paparazzi and major media houses in the colonies also makes Orbitals very media savvy. Gamemasters could easily have a PC party become sudden media darlings or make them the victims of a supposedly true "exposé."

Orbitals also take their security very seriously, all aware that they live in controlled environments vulnerable to damage and sabotage, and police campaigns can easily be set in a colony. Security teams spend much of their time keeping an eye on outsiders, PCs can become identified as threats very easily, and may have to find shelter somewhere in the colony.



▼ COMMERCE & INDUSTRY

The Orbital economy is one of service and manufacturing. Many of the cylinders were originally built by Earthbound companies before the Fall to house the staff of the orbiting factories. During the Fall, control of these stations shifted to those companies that had taken refuge in orbit. Today, as these companies reestablish their connections with Earth, the factory colonies continue to perform their intended tasks for their new partner.

The best-known orbital spaceport is Pyrea. It traces a broad elliptical orbit that brings it close to the moon once a decade. It is one of the main crossroads of the solar system, through which most of the traffic to or from Earth passes. In addition to hosting the USN Assembly and the Solar Cross' offices, Pyrea is also home to nearly six million people, making it one of the largest space colonies in the Solar System. Much of the station's local economy is centered on the large commercial shipyards that surround it.

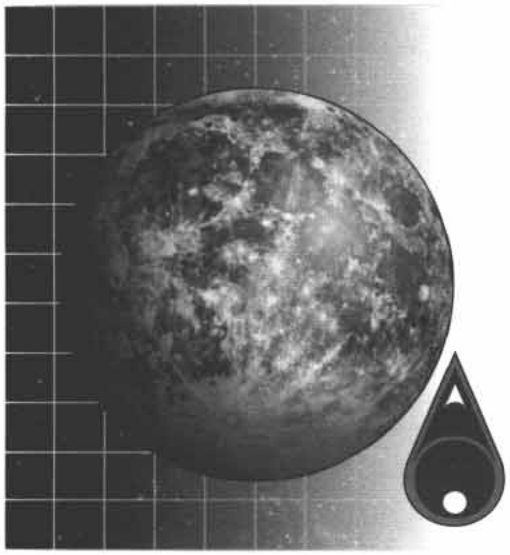
In addition to Pyrea, the space between Earth and the Moon's orbit is filled with satellites, power grids and workstations. The large solar arrays established in the beginning of the twenty-first century continue to provide most of the Earth's power. The workstations are divided into two rough categories: the labs and the autofacs. Labs are staffed by a rotating crew of scientists and workers who pursue mundane to arcane program of studies closely connected with Earth's interest. The autofacs are completely automated and staffed only by a small number of technicians who commute from nearby stations for their day's work. Rival orbital and Earth companies often share their ownership.

▼ RECENT DEVELOPMENTS

A flurry of activity has been noted in the colonies over the past few months. Shipyards are tooling up for new designs as well as increasing the pace of work on ships already under construction. A large area around Earth's L5 point has been marked off by radio buoys and is constantly patrolled by CEGA exo-armors. Nearby observers have reported seeing unknown types of vehicles, which display extraordinary maneuverability. Among military tech buffs, rumors abound of a new, upgraded Syreen/Dragonstriker hybrid. CEGA officials refuse to comment, citing national security and warn that any intruders who violate the borders of the test zone will be met with deadly force.

The destruction of Copernicus Dome on the Moon has aroused fear in the Orbital population concerning their own vulnerability. Police patrols and security measures have increased accordingly, and there are talks and rumors of secessionist movements being formed in the back rooms of pubs and the dens of private houses. The present government is investigating these rumors because any attempt at secession could lead to a war with CEGA, which the under-armed Orbitals could not possibly win.

▶ LUNA



▼ OVERVIEW

The Moon was the first attempt at permanent space colonization. The closeness and material richness of Earth's satellite made it a logical choice for the large corporations that founded the first colonies. The settlements, all named after nearby craters, were built underground to protect them from radiation and have been steadily expanding for nearly two centuries. Even today, the mines of the Moon provide the Earth and Orbitals with much of their raw materials, mostly oxygen, processed water and silicates.

In addition to a permanent population of about one million, Luna is home to several CEGA military bases. Lunar cities have a martial atmosphere because of the number of soldiers that spend leave there. All inhabitants of the Moon maintain rigorous exercise regimens and take mineral supplements and advanced biocompounds to counter the debilitating effects of prolonged life in low gravity. Natives of the Moon (known as Selenites) tend to be very tall and thin (much like inhabitants of Mars).

▼ CULTURE

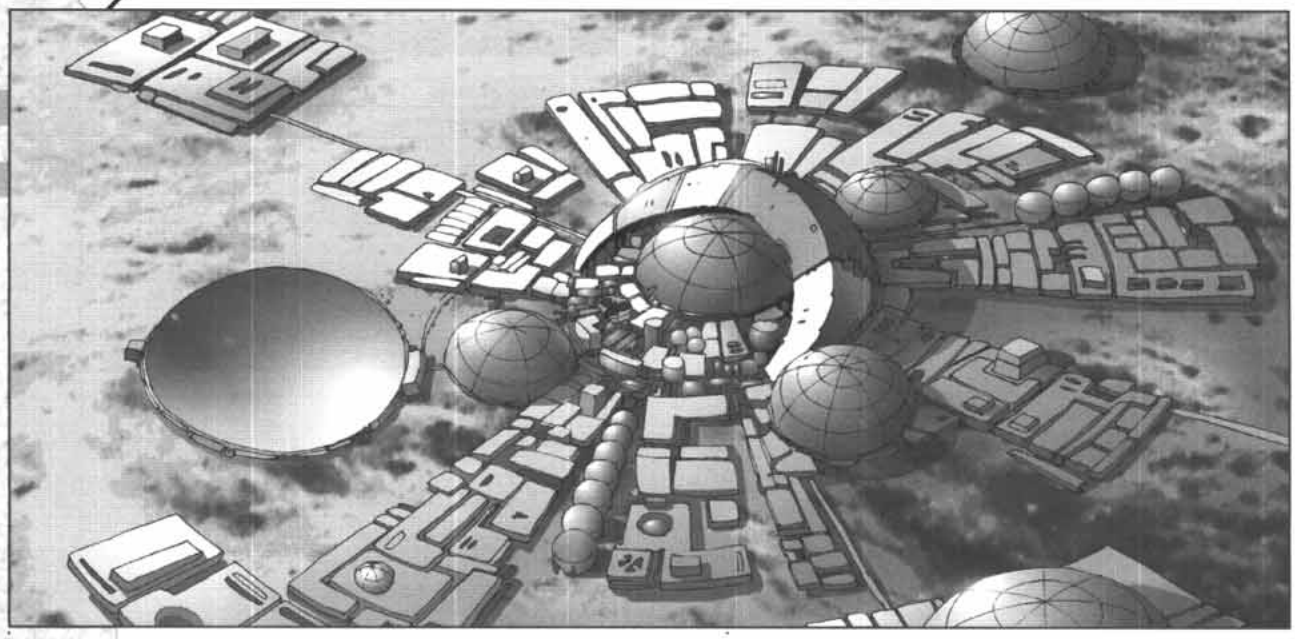
Selenites adapted to the rigors of self-sufficiency after the loss of support from Earth by becoming obsessed with scheduling and organization. An individual's life will be organized and scheduled from birth to death. Creativity and imagination are discouraged in order to focus attention on staying alive. This attitude persists in modern times, although the resumption of Terran aid gives them a few scattered holidays.

The culture that developed among the Moon's early settlers emphasizes discipline and hard work. The foreign visitor often has the impression that the Selenites are obsessed with work, and this is partly true. They do have free time, but are not noted for being "party animals." There is an exception to this, however: the 72-hour holiday known as the Festival. The Festival occurs every three months and is a three-day long, almost nonstop celebration. Randomly designated citizens are asked to remain on duty to take care of any emergency which might arise. The system of selection ensures that everyone does an equal share of the work in the long run, though individuals often exchange "tours of duty" as if they were currency.

The inhabitants of the Moon are always easy to spot in a crowd. Tall, pale-skinned and lanky, they exhibit an economy of movement and talk, a trait they share with the Nomad culture. Many Selenites are well educated. Even the lowly miners need to have a large body of knowledge to control and maintain the various automated pieces of machinery that do the actual grunt work in the mines and pits of the surface.

◫ THE MOON

Distance From Earth:	356,395 to 406,767 km
Revolution Around Earth:	27.3 days
Rotation:	27.3 days
Axial Tilt:	1.5°
Diameter:	3,476 km
Density:	3.342 x that of water
Mass:	7.4×10^{19} metric tons
Surface Gravity:	0.16 g
Escape Velocity:	2.38 km/sec
Average Surface Temperature:	-200° C
Atmosphere:	None
Hydrographics:	None
Population: 5.4 million (not including military personnel)	
Languages:	English, Spacer's Runic
Primary Exports:	Manufactured goods, raw materials, oxygen
Primary Imports:	Complex hydrocarbons, specialized food stuffs



Punctuality is praised as a virtue, and Selenites hate to be late at meetings or for scheduled activities. They always wear a timepiece of some sort, and seem to refer to it every five minutes. This is slowly changing, however, as many realize that times have changed and privations need not continue in order to ensure the survival of the lunar settlements. A growing discontent is spreading through the poorest population segment, which has begun to feel that hard-won profits should be used to relax the Selenite society.

▼ POLITICS

The Lunar settlements use the same representative system as the orbital cylinders. A council made up of representatives from each domed city votes on all the major decisions that affect the people of the Moon as a whole. Smaller councils take care of local business, such as setting the production quotas. The current council is led by Chairwoman Clarice Seleung, a former geologist from Descartes. The lunar cities are members of CEGA, a choice motivated by a need for resources from Earth as well as by a healthy fear of reprisals for ignoring CEGA.

Selenians are quite willing to trade freedom for security. Scattered rebel groups who oppose Luna's strict regimen are an exception. These rebels might be dangerous if they ever agree on what to do with freedom once they've attained it. The most infamous of the lunar freedom fighters is the group once led by Ismael Li, which has now scattered across the Moon in the wake of the Copernicus Massacre. Dozens of other, less active groups can be found in every lunar city, perpetrating minor crimes like vandalism and graffiti.

▼ SCIENCE & MILITARY

Selenites are among the solar system's best miners. The Lunar Mineral Exploitation Consortium (LuMEC) dominates the Moon's commercial scene as one of the few pre-Fall companies that maintained its power during the dark times. Its huge massdrivers continue to be one of Earth's primary suppliers of raw materials for space construction. Contrary to popular belief, the lunar massdrivers make very poor weapons. They are buried into the ground and can only shift their aim slowly. Their usual targets are the masscatcher nets located at the Lagrange 2 orbital point behind the Moon. The masscatchers are the space age equivalent of the old sea-going barges: when the massive conical nets are full, a fusion-powered tug pulls them to where the material is needed.

Though the Selenites manufacture several types of weapons, they have few troops. There is not much to fight for on the Moon apart from the installations themselves. As a result, most of their forces are defensive in nature and organization.

▼COMMERCE & INDUSTRY

Many other Lunar companies are military contractors who are gaining in importance due to the current political climate. The Lunar Aerospace Consortium (LAC) is the most important of these companies, and is responsible for almost all of CEGA's exo-weapon production. In addition to producing Syreens and increasing numbers of Wyverns, LAC undertakes test bed research for CEGA. The Dragonstriker exo-armor is one example of their R&D department's expertise. Many more groundbreaking designs are surely in the works.

The other main lunar industry is the production of specialized raw materials for the space construction projects. Every day, large sheets of aluminum, bundles of silicates, as well as oxygen and water tanks are sent up to waiting cargo ships. Between 55% and 65% of the mining operations on the Moon are under the direct or indirect supervision of the Lunar Mineral Exploitation Consortium (LuMEC). The rest is divided between several smaller companies such as the Space Mining Co. and Groundhog Works. LuMEC is one of the rare companies whose assets remained intact during the transition to a post-war inter-system economy, thanks to the careful management of its resources. Its leaders have a very strong influence on the Moon's political scene and while they seem eager to obey CEGA, they are quite prepared to oppose it if necessary.

▼RECENT DEVELOPMENTS

The massacre at Copernicus has aroused the ire of the Moon's civilian population against CEGA. Several acts of violence against CEGA soldiers have been reported, resulting in all off-base leaves being canceled indefinitely. All-out riots have been prevented by the narrowest of margins thanks to the calming words of Councilor Olga Kyushinova, who has also lodged a series of formal protests in the CEGA council chamber.

Ismael Li, the miner-turned-rebel who sacrificed his life at Copernicus Dome to save a group of fleeing Jovians, has become a folk hero of sorts on the Moon. Government blackouts of information pertaining to Li have only resulted in increasingly heroic underground stories about the fallen leader. His reputed last words — "My life for freedom!" — has become a rallying cry across Earth's largest satellite.

THE DESOLATE LAND

Like the Earth, the Moon provides the advantage of physical familiarity. We've all seen pictures and televised coverage of the Apollo lunar missions and references about Earth's satellite are relatively easy to come by. Players wishing to play Selenites must also give some thought to the culture they come from. In the 23rd century, the Moon is a settlement of hard-working people who do not value individualism or creativity. They are certainly not typical stock for PCs. In all likelihood, a PC will be someone who has broken out of this mold. Have they suffered some form of trauma or shock, such as being orphaned at an early age or seeing an injustice? Are they simply free spirits, unable to fit into the Selenite mold of social behavior? One possibility is for a PC to be a survivor of the Copernicus Massacre. These characters will have seen the brutality of CEGA's most militant wing and may be seeking justice or even vengeance.

Gamemasters bringing foreigners onto the Moon can emphasize the gritty, working-class atmosphere of the resource frontier. Selenite communities tend to be no-nonsense affairs and Lunar inhabitants have a reputation as hard working and hard drinking people. Law and order are enforced by community peacekeepers or even CEGA soldiers if need be. Outsider characters should face resentment from those who do not share their "good life" and could easily become victims of violence during designated rest or relaxation periods. PCs can also hook up with rebel groups, who may honestly want their help or may wish to use them for some more devious purpose. Either way, PCs will probably have to prove that they are not CEGA spies.

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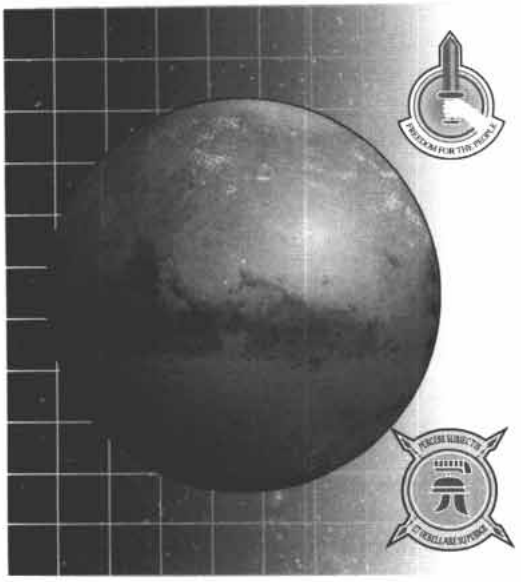
▶ MARS FEDERATION AND REPUBLIC



MARS

Distance From Sun:	227,900,000 km
Revolution Around Sun:	687 days
Rotation:	24.6 hours
Axial Tilt:	25.2°
Diameter:	6,787 km
Density:	3.9 x that of water
Mass:	6 x 10^{20} metric tons
Surface Gravity:	0.38 g
Escape Velocity:	5.15 km/sec
Average Surface Temperature:	5° C at this stage of terraforming
Atmosphere:	0.6 atm (75% carbon dioxide, 12% oxygen, 13% nitrogen, greenhouse gases)
Hydrographics:	11%
Population of Planet:	350 million
Population of Orbital Stations:	4 million
Languages:	English, German
Primary Exports:	Manufactured goods, iron, aluminum, medical supplies
Primary Imports:	Foodstuffs, complex hydrocarbons

▼ OVERVIEW

The terraforming of Mars was one of the greatest technological projects ever attempted by humanity. The first Martian colonists were dreamers, people who were willing to devote their entire lives to changing the face of a planet. As Mars grew in wealth and population, and as Earth collapsed, the Terran corporate and government interests that had sponsored Mars' colonization attempted to take control of the planet in the hope of stealing its resources to rebuild their power. The great distance involved, and the Martians' own remarkable stubbornness, however, proved to be insurmountable obstacles. In 2085, Mars wrested its freedom from Earth's grasp. Independence had a price, however. The following years saw several civil wars erupt as the Martian Democratic Party fought to retain power in the face of a concerted opposition which disagreed with the Party's desire for a strong central government. Today, Mars remains a divided world.

Mars has long attracted a hardy brand of pioneers. Most of the immigrants that made their way to the Red Planet in the twenty-first and twenty-second centuries were of one of two groups. The first was composed of people escaping tyranny, war and persecution. These have an aversion to central government control. The others were escaping poverty and hardship. They wanted only to find a peaceful place to live, and were more ready to accept a strongly hierarchical society in exchange for security. Both had to make many compromises to build a new world for Mankind. Martian history has demonstrated that the experience was less than successful, and that the diametrically opposed philosophies are hardly compatible. While timid attempts are made by prudent diplomats to re-establish formal relationships between the Republic and the Federation, most observers foresee that the situation is only going to deteriorate in view of the growing tensions between the CEGA and Jovian governments. Regardless, despite their many cultural differences, the Martians share several characteristics.

▼ CULTURE

The Martian Federation is a totalitarian state founded by General Otto Kurtz after Mars' bid for independence. Life under the Martian Democratic Party is controlled and ordered. People are used to daily security checks and propaganda-as-news releases. Although Kurtz is dead, his legacy remains: German, his native language (and that of many early colonists), is an official language with English, and German ranks and titles are used in the Federation's military and business communities.

The Martian Free Republic, on the other hand, gives its citizens great personal freedom. It was created by convention between the Federation and the non-aligned frontier settlers, both of whom were tired of fighting over territory. The Federation agreed to recognize the newly founded Free Republic's independence and permit its people to live as they chose, but gained the right to set the political borders on Mars. The Republic resents that agreement to this day.

◇ MARTIAN FEDERATION

The Federation citizens are used to a controlled society ruled by bureaucracy, and do not think much of it anymore. They shuffle about their daily business; their ambition reigned in by the rules of the society around them. They maintain a quiet pride in their nation and its accomplishment, and will resent any badmouthing about it. The citizens are expected to publicly advocate the Federation and the media only mention events in the Republic if they serve to demonstrate how superior the Federation is to its neighbor. Recently, the Ministry of Peace and Justice has voted some laws to encourage citizens to report individuals whose loyalty to the Federation is dubious. This has caused some turmoil in the universities, especially among those that advocate free thinking.

The Federation's citizens have grown accustomed to frequent identity checks and the weight of numerous rules of conducts, and most will be genuinely surprised if someone complains. They regard their lesser freedom as something to be proud of, since it allowed them to survive a harsh environment. They sincerely believe that it is cement that strengthens their society. Had Otto Kurtz not instigated some of those measures when he did, the Federation might have ended up in the chaos which frequently rocks the Martian Republic. Indeed, most citizens have a high degree of respect for Kurtz and often visit his memorial. Federation citizens dutifully follow the rules, and are often easy to recognize on other worlds by the attention they pay to the insignificant rules which everybody else ignores (jaywalking, minor cheating on income tax reports, crossing on a red light, etc.).

As a whole, the Federation is a highly successful society, and while it is maintained through political force, there is no denying its achievements. Some of the best universities in the solar system are found in the Federation and the citizens enjoy a rather high quality of life for a former colony.

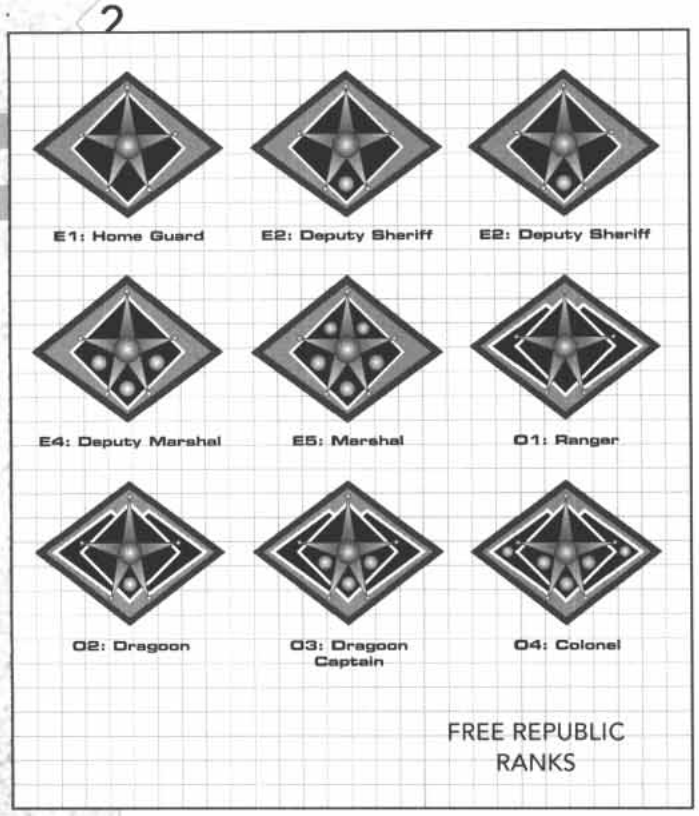
◇ MARTIAN FREE REPUBLIC

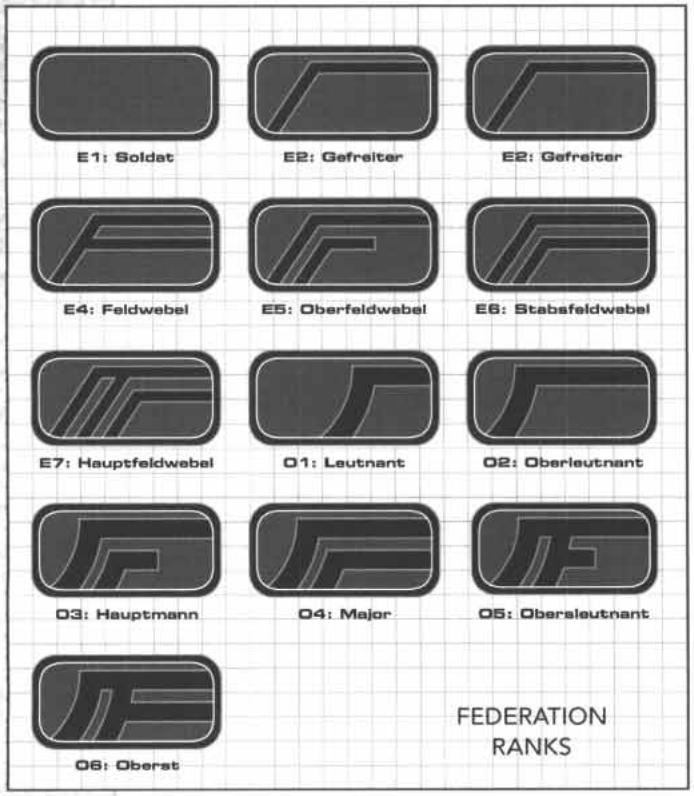
The citizens of the Republic have often been likened to the settlers of the old nineteen-century American West. Strong-willed and self-dependent, they have a frontier-like mentality, distrustful of strangers and hardworking. They live in small towns and settlements where everyone knows everyone and secrets are hard to keep. They do not live apart from the world, though: all homesteads are equipped with high-gain antennae and satellite dish to remain in contact with the rest of society. Technical expertise and jury-rigging are part of every Republican's life, and teenagers often compete with each other based on their technical know-how.

Republicans value friendship and honesty above all. Though their trust is hard to gain, they remain extremely loyal once befriended. They do not take well to betrayal, and will likely not forget such an offense. Some Republicans have taken the habit of exchanging a bond-token with their best friends to express their sincerity and appreciation. The token is often a bracelet worn on the left hand (for the men) or a neckband (for the women). It is seldom exchanged between husband and wife since they already share a much deeper bond. Stealing, damaging or simply hiding the bond-token is a sure way to earn the wrath of a Republican.

Free Republicans are brutally honest, a trait that has started more than one brawl in the taverns of Sirtis Major and Olympus Mons. They say what they think, often loudly, and never let an argument go until it's resolved (through a good natured fist-fight if required). On the other hand, grudges about such differences of opinion are rarely held and good brawls often turn into celebrations.

The Republican homesteads have strong traditions of hospitality, dating back to the early colonists. These traditions are a result of the harsh Martian environment and its sudden sand storms, which could doom travelers stranded in the open. In the early days of the colonization effort, it was customary for the hosts to give some form of parting gift to their visitors, usually way bread, some salt and some water. This practice has survived over the years, even though the portions have been greatly reduced since few people need the gift.





▼ POLITICS

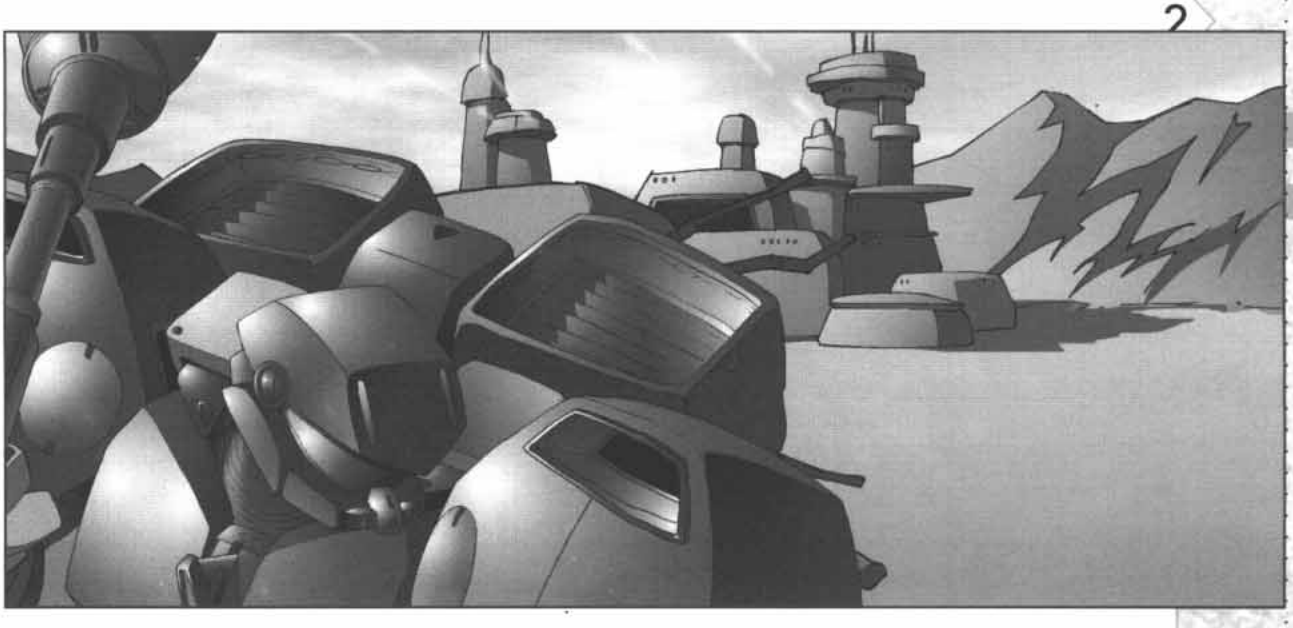
The Martian Federation claims two-thirds of Mars' surface. It is governed by Prime Minister Klaus von Braun, who rules with a firm but even hand. The Free Republic's bureaucracy is significantly more complex due to the convoluted system of checks and balances necessary to ensure freedom while still maintaining national security. Four separate elected councils make policy for the Republic. The president, Marcus Frehley, is primarily a figurehead since Republicans dislike the idea of a single, powerful leader. Both Martian nations send their own delegations to the USN assembly.

Border skirmishes on Mars are a frequent occurrence; both governments have preferred to ignore the incidents rather than expand the conflict. This policy was born of the need to remain on good enough terms to share the orbital elevator and other space resources. With the elevator's destruction, however, the Federation may start to pay more attention to the constant testing of its borders.

▼ SCIENCE AND MILITARY

Although research into bioengineering has stagnated over the decades, the Martians are experts in the numerous past and scarce recent advances generated by that field. Their careful and meticulous research has produced strains of bacteria used for terraforming purposes on both Mars and Venus; by 2210, a combination of cometary ice drops, bacteria and algae has raised Martian atmospheric pressure to nearly two-third of Earth's, replacing the need for bulky spacesuits by lighter pressure suits and oxygen masks. Under the watchful eye of the rest of the solar system, scientists from both Martian nations continue to investigate ways to make further use of bioengineered life forms for the benefit of humankind.

Both Martian countries have standing armies, although they are rather small and use old exo-armor designs purchased from the Jovian Confederation. The Martians have little use for exo-armors and rely primarily on desert-adapted exo-suits and hovertanks. Neither military has a significant space navy, possessing only patrol crafts and monitors to police the orbital colonies.



◇ MARTIAN FREE REPUBLIC RANGERS

Due to the Free Republic's small population and the enormous amount of territory its military is expected to defend, the Rangers are smaller, better trained and more loosely organized than any other army in the solar system. Mobility and stealth are most important to the Rangers, so their use of small exo-suits and fast ground-effect hovertanks is quite extensive (although their token space force does use exo-armors). Their overall approach to strategy heavily emphasizes hit-and-run tactics and guerrilla-style warfare. In the face of the Martian Federated Army's superior manpower and equipment, the Rangers must plan to hit the enemy below the belt, or risk not living long enough to hit at all.

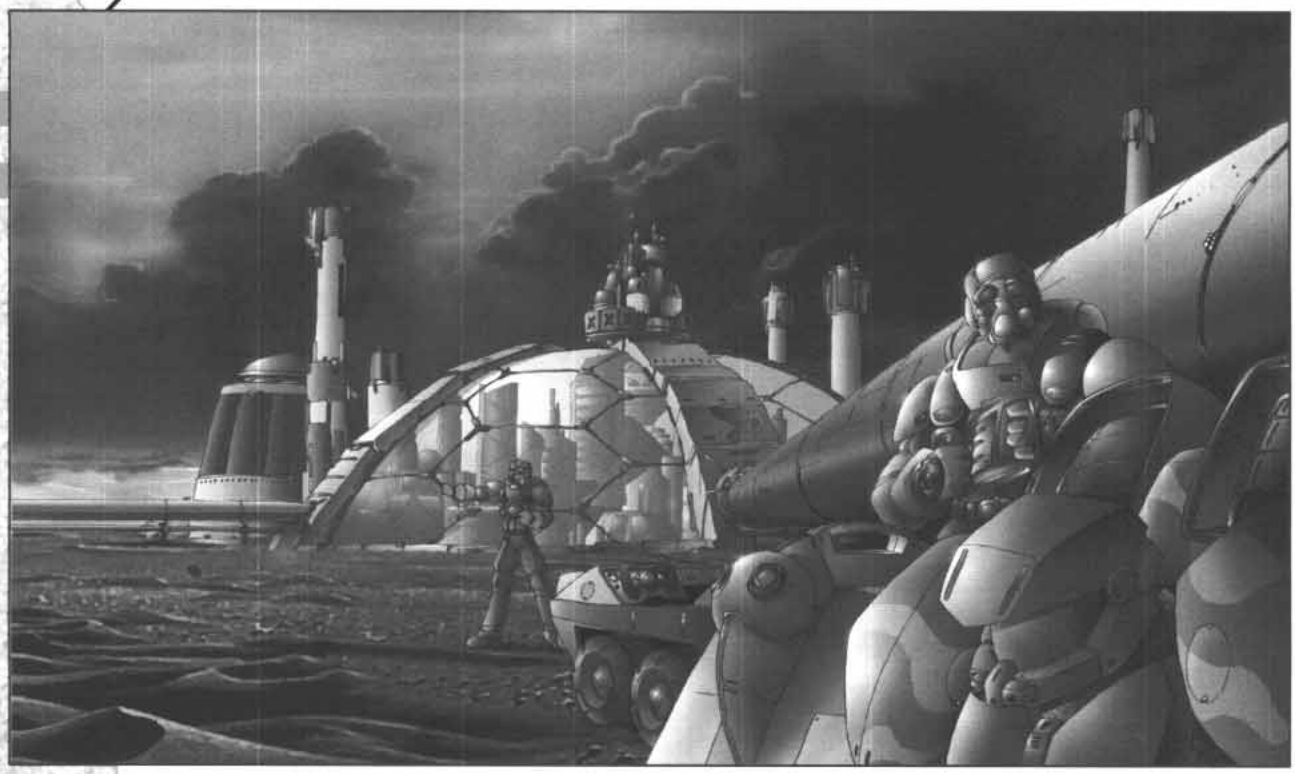
Training is, by necessity, of the "down and dirty" philosophy. New recruits are taught their trade in the field. The Rangers care little for parade maneuvers and spit-and-polish, so boot camp is a combat-training experience. Training is often multidisciplinary and spread out over several years; the average tour of duty for a Ranger is ten years (about five Martian years). Grueling exams are given every few months, testing everything from cryptography to emergency survival in the deep desert. There is very little idle time; any spare time is expected to be spent training. This brutal lifestyle is vital to the security of the Republic: every Republic soldier must compete with ten Federation soldiers on the battlefield.

Personnel with the ranks O1 through O3 are rarely referred to by their actual ranks. They prefer to use the "Marshal" rank instead, so that enemies will not know the actual rank of the officer they are facing. Because of this, the Marshals are the most publicly recognized figures in the Rangers. They often serve as garrison commanders. Their large numbers are accounted for by all the higher ranks which also refer to themselves as Marshals, a convention that confuses everyone but the officers themselves.

There are only seven colonels in the Free Republic Rangers. They are the highest-ranking officers in the Rangers, reporting directly to the Secretary of Defense. Each colonel commands a Division of the Rangers and can operate independently of the others, ensuring maximum flexibility. All seven are seasoned troopers who regularly spend time in the field alongside their fellow soldiers. One of the colonels is in charge of the space-based forces, while the rest direct operations on Mars' surface.

◇ MARTIAN FEDERAL ARMY

True to the government Otto Kurtz helped create, the Federated Army is very structured and disciplined. Ranks are extremely important and the chain of command is absolutely respected, both in peace time and on the field. This blind adherence to outdated tradition is paid for in loss of flexibility on the modern battlefield; Free Republic forces often run circles around Federated Army troops that are waiting for orders.



The Army is based on a basic five-man unit called a grupen, which is commanded by a Gefreiter or an Unterofficer. Five grupen form an Obergrupen, under the command of an Oberfeldwebel. He is assisted by a Hauptfeldwebel for both administrative and command duties. The Hauptfeldwebel is the rough equivalent of a Sergeant in the United States Army of the twentieth century. Tough and hardened by years of grunt combat, they often serve as drill officers at Army training camps. They are career noncommissioned officers who are feared and respected by the trainees they command. On the battlefield, higher-ranking officers have been known to defer (unofficially, of course) to a Hauptfeldwebel's experience and combat savvy.

Exo-armors and other vehicles are also assigned to grupen, although they are then commanded by an Oberleutnant. Each grupen is assigned a unit number that does not change throughout its existence. The prefix "Sturm" (for exo-armors), "Blitz" (for conventional and aerospace fighters) or "Panzer" (for armored ground vehicles) is added after the unit's number for a more exact description. For example, the 23rd Sturm Grupen is an exo-armor unit. The Federation's small space navy is a separate entity from the Army.

Grupen are normally assigned to a garrison pool, when stationed at one of the major Federation bases or settlements. They are reassigned to combat divisions as needed for the duration of a campaign. This fluid structure somewhat compensates for the rigid hierarchy of the army. Each grupen has its own symbol, worn by all its members and painted on all its vehicles. The soldiers take great pride in the appearance and reputation of their grupen.

▼ COMMERCE AND INDUSTRY

The Martians used the orbital elevator as a low-cost means of moving raw material and manufactured goods into space for transport to the rest of the solar system. Its design exploited the lower gravity field coupled with the survivable conditions found on Mars to extent orbital skyhook cables down to the surface. Heaven station, the orbital section of the elevator, crashed and is no more than a half-vaporized hulk spread over kilometers of Martian continental shelf. The remains of Hell Station, the ground section of the elevator, are located at Pavonis Mons, a large mountain located on the Martian equator. Several outside interests' factories in the Mars orbit were

designed to take advantage of the elevator. Its destruction has raised their operating costs dramatically. Phobos, Mars' moonlet, no longer exists in 2210. Due to the danger to the elevator at its orbital altitude of 6000 km, it was taken apart and used to build colonies and spacecraft. Most of the material went into large, thin orbital mirrors called solettas that were built to help warm Mars. These are constantly being expanded to help terraforming efforts.

Several large mining/manufacturing companies exist on Mars. The largest of these is Martian Metals, a planet-spanning consortium that employs nearly a tenth of Mars' population. Mars also maintains a healthy pharmaceutical and medical trade with other nations based on its production of bioengineered bacteria. The rigors of the Edicts (see p. 108) make it desirable for the solar nations to turn to the "experts" on Mars for their bioengineering needs.

▼RECENT DEVELOPMENTS

The recent destruction of the Federation's orbital elevator was a great blow to that nation's economy. The Red Planet has not turned into a battleground, however; the two nations are now gathering their forces and quietly re-evaluating their positions in the hierarchy of solar nations. The Free Republic has aligned itself with the Jovian Confederation in the USN chamber and is considering a military alliance as well. The Federation is occupied with rooting out the perpetrators of the elevator disaster, and its suspicions are turning toward its lukewarm ally: Earth.

For the people of both Martian nations, everyday life has changed little. The repairs to the planetwide damage caused by the impact of the falling elevator are proceeding apace, and the thrown-up dust has been compensated for by the terraforming teams. Soon, the only remaining sign of the catastrophe will be the gigantic scar running along the equator on the surface crust.

STEEL GAUNTLETS AND ROBOT RODEOS

Players wishing to play Martian characters need to make a choice between the two Martian states. Depending on their origin, Martian characters will tend to be either disciplined strict people or free-thinking individuals with a rebellious streak; the polarized situation of the planet tends to be reflected in its population. Otherwise, though, the Martians form a more homogenous group than they like to think. Much like in Lunar societies, Mars-born children learn from an early age the various security procedures and the use of survival gear. They also learn the basic physical principles related to pressure and atmosphere, and the peculiarities of the Martian environment (fear of sand storms is an unfortunate if healthy side-effect of this aspect of Martian culture).

Regardless of the choice, they will need to choose their stance regarding the opposing state and whether they wish to act on it. It is very likely that PCs will want to have some involvement and will work either against a state as military personnel or terrorists, or in favor of reconciliation. Some may favor a temporary truce in order to strike back against Earth (or STRIKE, depending on who one believes) for having destroyed their orbital elevator — especially those PCs who lost a family member in the tragedy. They may investigate tourists and visitors in hope of finding an ally who could help them in the fight against their enemies.

Gamemasters setting stories on Mars should not ignore the conflict between the two local states. Skirmishes, diplomatic incidents and threats of all-out war are commonplace and could easily form the basis of a scenario. Indeed, PCs could be accused of being spies or innocently aiding one side or the other. Of course, PCs from a military background may well be on Mars precisely for that purpose — CEGA forces aiding the Federals or Jovian envoys to the Republicans. Mars is not only a planet of warfare, however. The locals are ambitious pioneers in the process of creating a new Earth for themselves. The rugged environment can be a deadly foe and the quest for resources can motivate many adventures.

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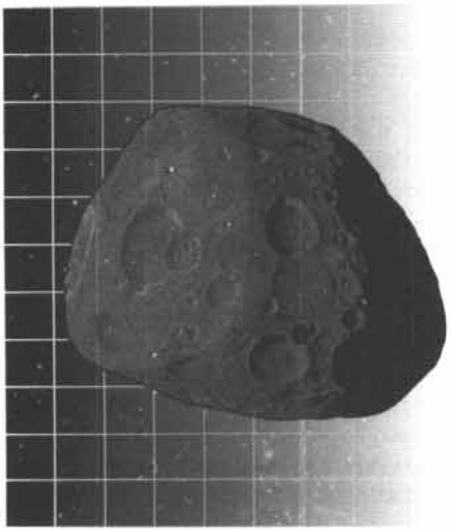
▶ THE BELT



▼ OVERVIEW

The Asteroid Belt was first colonized as a mining venture in the 2030's. With the troubled times of Earth and the resulting introversion of the solar nations, the various Belt mining companies lost money and faded away. Over the following century, the Belt became a place where refugees built new homes for themselves, far away from the stifling inner system and ignored by the solar nations.

These modern-day Nomads have colonized small asteroids, outfitting them with gravity wheels and thrusters to make them habitable. Their numbers have remained rather constant for the past few decades. As new groups of refugees move into the Belt, a steady stream of nomads decide to give up wandering and join one of the solar nations. Abandoned colonies are quickly reoccupied and refitted to continue on their journeys under new ownership.

▼ CULTURE

Life among the nomads is rigid by necessity due to the constant struggle for survival. In the close confines of the asteroid colonies, laziness and rudeness are considered the worst of weaknesses. The resulting strong work ethic, coupled with their expertise in jury-rig-style engineering, makes the Nomads highly valued throughout the solar system, except on Earth and Venus where they are regarded as little more than barbarians.

NOMADS AND THE ASTEROID BELT

Distance From Sun:	Variable
Revolution Around Sun:	Variable
Rotation:	Variable
Axial Tilt:	N/A
Diameter:	Variable, usually within 0.5 to 2 km
Density:	Variable
Mass:	Variable, depending on mineral density
Internal Gravity:	0 to 1 g, depending on installations
Escape Velocity:	Variable, but always very low
Average Indoor Temperature:	18° C
Atmosphere:	0.5 atm (55% nitrogen, 40% oxygen, traces)
Hydrographics:	None to 30%
Population:	2.4 million (est.)
Languages:	English, Spacer's Runic, variable
Primary Exports:	Minerals, specialized labor force
Primary Imports:	Resources, specialized food stuffs, water, fuel

Although native languages vary among the Nomad settlements, all Nomads are taught Spacer's Runic as a matter of course. This language, virtually unchanged since its creation in the mid-twenty-first century, has become a common tongue among all space faring folk, allowing rudimentary communication when spoken language proves to be a barrier. When traveling abroad, Nomads tend to use Spacer's Runic instead of their spoken tongue, which causes the mistaken impression among Venusians and Earthlings that Nomads are mute dullards.

Nomad societies, despite coming from very different cultures, have developed specific rules and customs from their years in space. These are very distinct from the rest of the human space faring societies. Nomads don't exactly have a homogenous culture, but share similar characteristics which stem from similar environments. After all, Nomads don't have a great deal of contact with one another or with other civilizations of the solar system in general, though they often listen in to the radio chatter of the news services. They live in small clans and educate each other as old Earth tribes did, passing on knowledge from parent to child. This lack of formalized education would normally increase the risk for error a great deal, but a strong emphasis is always put on safety first. Technology, such as teaching expert systems, is usually enough to fill in the gaps. Those who fail to properly learn the lessons are quick to die. The Nomads don't have weapons or armies to speak

of, and rely on wit and prudence to defend themselves. They stay away from pirates, as well as from CEGA and Jovian forces patrolling in their area. "Let the big guys kill each other," they say, "we'll just scavenge the area when they've left."

◇ LIVING IN SPACE

Nomads, as a rule, tend to be neat and tidy. They constantly look after the states of thing and are almost obsessive about cleaning up. Most people find this exasperating — it is hard to speak to a Nomad for more than five minutes without him interrupting to check a gauge or wipe a table clean. This is not insanity: messy spacecraft and habitats are a constant danger. Items floating about may become deadly missiles under acceleration, loose dirt may foul up the air conditioner, or a ripped pocket may spill the tools needed to repair a critical system. An unkempt Nomad is a dangerous or suicidal Nomad, and is often shunned by others. Nomads are also known to rarely make unnecessary gestures, a habit developed because of the confined space in which they live. The less extra gestures made the less chances of bumping into someone or something, or hitting dangerous controls. They make extensive use of hand signals to emphasize their instructions, however, just in case a radio failure prevents communication between two workers in space suits.

"Do it like a Nomad" is a common saying in the solar system. The unforgiving environment of space means that Nomads are very serious about their duties, especially when it comes to maintenance, and they despise laziness above all. Each individual represents a pool of knowledge and technical skills that are vital to the small community. Experts are rare (cross training is a survival trait), and all Nomads are computer-literate almost before they are truly literate.

The asteroid-dwellers live in small groups. Nomads value friendship and family bonds. They feel uncomfortable around total strangers, though they do not shun them — other Nomad groups represent possible allies and mates for the youngsters. Families are highly self regulated, both to prevent overcrowding and because low-gravity pregnancies require special attention that may not be available during certain periods. Nomads have few personal belongings, but are protective of what they do have. Tools and instruments are generally the property of the entire tribe, and are to be shared and maintained by all users. Resources are also precious, especially water, which is found only locked in certain types of asteroids.

▼ POLITICS

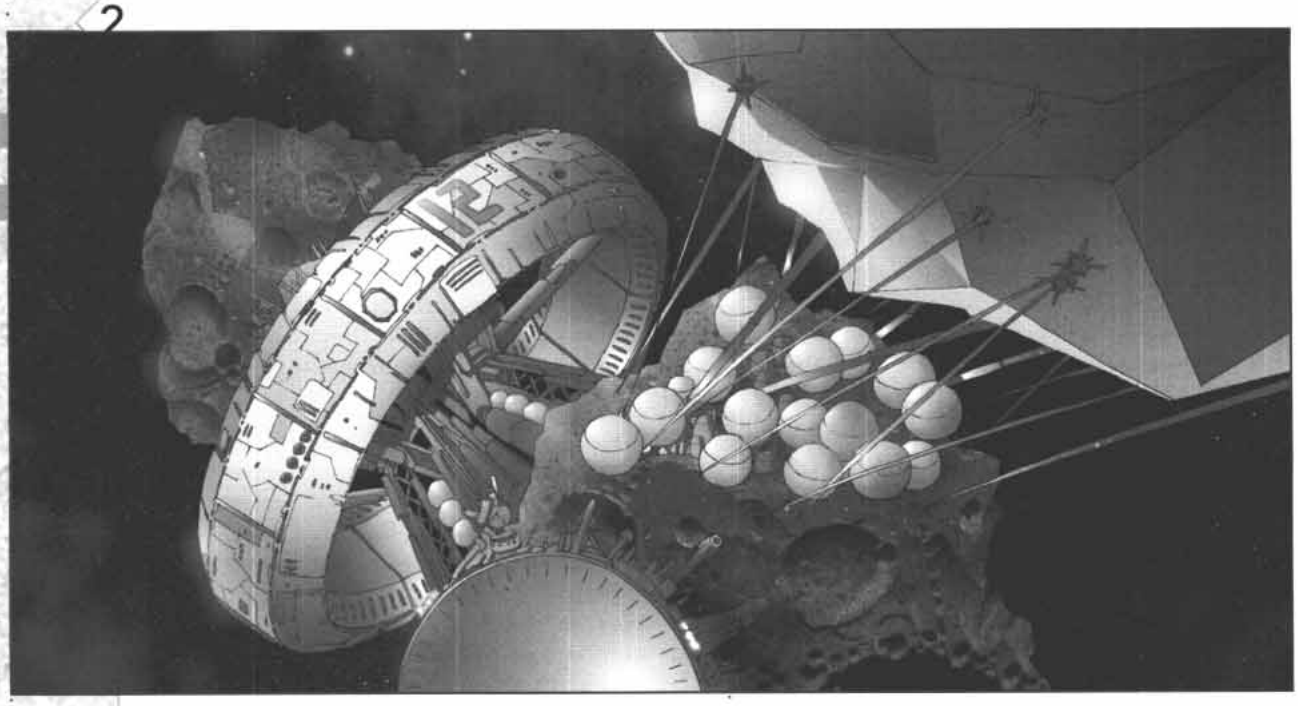
Every Nomad colony is directed in a different way. Some are ruled single-handedly by "chiefs" while others operate on nothing more than mutual politeness. Laws and customs also vary widely. The only true inter-colony law that all Nomads adhere to is the age-old Golden Rule. They do not meddle in the affairs of others and expect to receive the same consideration in return.

On the international scene, approximately thirty of the larger colonies have formed a loose association in order to speak for Nomad interests at the USN Assembly. Most of the participating colonies are located in the Asteroid Belt, so their seats at the Assembly chamber are labeled "Belt." The colonies that choose not to participate in this token entry into politics truly do not care what goes on outside the boundaries of their tiny domains. Nobody speaks on their behalf, which is exactly how they want it.

▼ SCIENCE AND MILITARY

Scientific innovation is not a great concern for most Nomads. Whatever they need can be bought or traded from other settlements or merchant ships. If, as is often the case, these sources prove unavailable, the Nomads are quite capable of handling mechanical problems. As a result, many Nomad stations are labyrinths of exposed wiring and makeshift pipe work.

As a rule, Nomads tend to exclude themselves from tensions between the solar nations. They are not merely neutral, but almost totally uninterested as well. Thus, the tribes have no standing military or any sort of provision for one. If a crisis does arise and diplomacy and bribery fail, the Nomads are well prepared to surrender unconditionally. Some of the larger and wealthier colonies maintain a few obsolete exo-suits and space fighters for border patrol against pirates, but these would prove to be little obstacle to a determined invasion force.



▼ COMMERCE AND INDUSTRY

The Nomads inhabit only a tiny fraction of the asteroids in the Belt and solar orbits; millions more are mined for resources. Most Nomad colonies perform mining operations to some extent in order to generate income. Many of the best mining asteroids in the Belt bear the identifying mark of one Nomad group or another, staking out a claim for future exploitation. Among Belters, claim-jumping is one of the most heinous forms of rudeness imaginable. This "advance claiming" of much of the Belt's resources restricts the mining operations of other nations in the Belt, although the Belters really have no means of defending their "territory" should a determined incursion occur.

Nomads are merchants by necessity. They cannot produce all they need by themselves, and will thus engage in trade whenever it proves convenient. Mercurian Merchant Guild ships pass through prearranged pickup points every few months to exchange equipment, foodstuffs and water for processed minerals. Trade has the additional advantage of mixing the Nomad population, allowing new genes to enter the community and preventing the effects of inbreeding in isolated settlements. Many tribes have traditions that force youngsters to seek mates elsewhere.

Nomad-raised technicians and crewmen are very sought after, accustomed as they are to cramped living conditions and constant acceleration changes. Many Nomads leave home to work for companies or governments, saving their earnings for use upon their return. The Mercurian Merchant Guild has a special arrangement with the Nomads, allowing them to work aboard Guild vessels as highly paid non-members, although they are restricted to certain common areas of the ships to keep them away from Guild secrets. Caring little for such bizarre rituals, the Nomads are more than happy to take the Mercurians' money.

▼ RECENT DEVELOPMENTS

The Nomads continue to prefer isolation, but events seem to be conspiring against them. For decades, the Jovians and Martians have allowed the Nomads the first choice of mining asteroids, and have otherwise left them alone. Recently, however, representatives from Jupiter, CEGA and Mars have been visiting the major Nomad colonies and probing their willingness to become affiliated with one or the other. The tribes now feel trapped by the location that was once such a suitable sanctuary. If they accept the foreign proposals, they will be forced back into the international politics that they so despise; if they refuse, they fear that the nations will eventually move in by force. The current stance among the sponsors of the Nomad delegation to the USN is to gently explore a deeper relationship with Jupiter or Mars.

ZOCALO

The zocalo (pronounced ZOH-ka-low) is a combination of carnival and marketplace where Clans meet to trade, share information and resolve disputes. At any given time, there are hundreds of zocalos taking place around the Belt, since any Clan can host one. Zocalos are usually restricted to Nomads only; independents are welcome, as long as they are with Nomads who can make proper introductions.

Clans coming to the zocalo with merchandise to trade may rent booths in the market areas. Poorer Clans that cannot afford booths trade right out of their docking bays. There is little organization: docks and booths are rented on a first-come, first-served basis. Brokers, part guide, part matchmaker and part salesman, keep track of where various kinds of merchandise are in supply or demand.

BIGGER IS NOT BETTER

Living on large asteroids is too much like being tied to a planet for most Nomads. Although the Belt has hundreds of asteroids with diameters greater than 100 km, only the largest of these, Ceres (about 930 km in diameter) is home to a large population. Ceres City is generally regarded as the "capital" of the Belt, but only because it is where the affairs of the Belt's USN delegation are managed. Originally a large mining center, Ceres City (also known as Piazzi) is home to one of the largest massdriver arrays in the solar system. The difficulty of constructing rotating gravity wheels on a massive object has limited the colonization of the larger asteroids to the domain of the very wealthy.

Most Nomad colonies are built as rings around small asteroids less than a kilometer in diameter. These asteroids are easier to move, making them more appealing to small groups of wanderers who prefer to keep their location secret. More rarely, an entire asteroid will be hollowed and converted into a Vivarium-type colony cylinder. This, too, can be moved, albeit with greater difficulty.

THE NEW FRONTIER

The Nomads of the Asteroid Belt are modern homesteaders, carving a living out of the resources found in space. Once in orbit, almost anyone can build a simple spaceship that will be more than sufficient to house a family as it travels to the new frontier. Many of these bands are outposts of cultures that have been largely assimilated or repressed elsewhere, such as African or Scottish Highlands culture. Often, they travel together in tribes, settling on an asteroid for a generation or two, fiercely defending their territory. Proud and resourceful, they make the perfect background for a player character. A group of players could decide to form a Nomad family and have adventures as they travel from one asteroid to another, or they could be a small band of orphans who lost everything in the small conflicts opposing CEGA and Jupiter forces in the asteroid belt, and who want to avenge those they lost. Another group of player may act as scouts-for-hire for Nomads, seeking new asteroids for them to inhabit when they leave their current home.

Gamemasters bringing a PC party to the Belt can emphasize the frontier atmosphere of the region. Unlike Venus, Mars or the Jovian Confederation, the Belt is not home to powerful nations and mega-corporations. Small bands of dedicated individuals have carved out a life for themselves. PCs seeking escape for oppression might well decide to set up in the Belt themselves. Mars, CEGA and Jupiter are all interested in exerting a certain control over the Belt, so the region has become something of a political and military hot spot.

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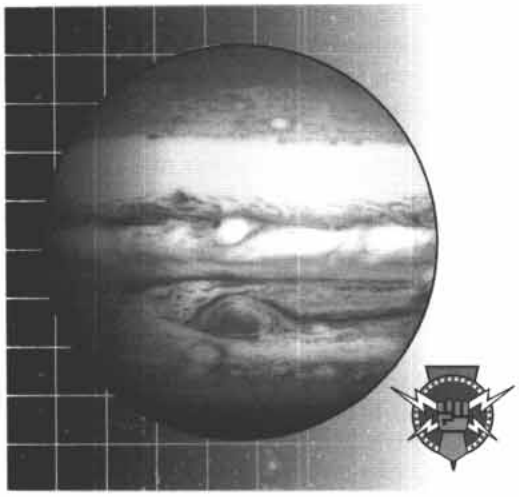
▶ JUPITER



◫ JUPITER

Distance From Sun:	778,300,000 km
Revolution Around Sun:	11.86 years
Rotation:	9.9 hours
Axial Tilt:	3°
Diameter:	142,800 km
Density:	1.3 x that of water
Mass:	1.9×10^{24} metric tons
Surface Gravity:	Depends on altitude
Escape Velocity:	59.5 km/sec
Average Surface Temperature:	-130° C at cloud tops
Atmosphere:	86% hydrogen, 14% helium, 0.1% methane, 0.02% ammonia
Hydrographics:	None
Population:	540 million
Languages:	English, Spacer's Runic, French
Primary Exports:	Electronics, manufactured goods, gasses
Primary Imports:	Specialized foodstuffs

▼ OVERVIEW

The massive colonization of Jupiter's orbit was not a planned event. The first stations around the huge planet were thickly armored wheels crewed by highly paid technicians. These stations were built for the express purpose of mining Jupiter's rich gas resources. Other mining colony stations were built by the same companies in Jupiter's L4 and L5 points.

The Fall of Earth changed everything. Millions of refugees, fearing that war would spread throughout the inner solar system, fled as far as they could and settled in the orbit of Jupiter. Once there, they discovered that life without solid ground or a bright sun was possible, and that the vast untapped resources that surrounded them would ensure comfortable lives for their children. Pursuing that dream, the Jovians worked hard over the next century to survive their harsh environment and build a civilization for their descendants.

The modern Jovian Confederation consists of three states of roughly equal size. Olympus, located around Jupiter itself, is the founding state of the Confederation and is where the Confederation's capital, Elysée, is located. The other two states reside at Jupiter's L4 and L5 points. These are over 800 million kilometers ahead of and behind Jupiter in its orbit and are home to thousands of asteroids. These asteroids are known as the Trojans. The colonies constructed amongst them are referred to as the Trojan States: Vanguard Mountain and Newhome. Both were founded by expanding Terran corporations and joined Olympus in an equal partnership to cover each others' resource weaknesses. All three formed the Jovian Confederation in 2113.

The Trojans are almost as far from Jupiter as the sun is. Despite this, the ties between the three states are very close. Being this far from the sun makes the Jovians much more in tune with each other than with anyone else in the inner solar system. Over the years, an extensive network of refueling stations and communications relay outposts has been constructed. A constant stream of ships and barges take advantage of the local unlimited fuel supply to provide a constant link between the Jovian settlements. The Jovian Confederation is both the most spread-out nation in the history of Humanity and one of the most stable.

◇ THE JOVIAN SUBSYSTEM

Jupiter is gifted with more than sixteen satellites, although only four are big enough to be worthy of mention. The others have been exploited over the years for raw materials with which to construct new colony cylinders. The four major moons — Io, Europa, Ganymede and Callisto — are known as the Galilean satellites and are home to an increasing number of Jovian citizens. Three of these satellites (Europa, Ganymede and Callisto) are covered with thick crusts of water ice mixed with mineral impurities. With no reliably solid ground

upon which to construct gravity-simulating carousels, inhabitants of these moons must live in constant low gravity. As the orbital cylinders become more crowded, however, an increasing number of their inhabitants agree to leave them to staff the stations. Nevertheless, the population of the moons is a tiny fraction of the overall population of the Confederation.

Io is the closest major satellite to Jupiter, located deep within the powerful Jovian radiation belts. The moon is highly volcanic, with enormous geysers spitting plumes of sulfur reaching 1400 kilometers in height. This hostile environment means that the exploitation of Io's abundant sulfur deposits is carried out almost entirely by robot drones. Io is also home to an experimental power source. Orbiting collectors take advantage of the five-million-ampere flux tube (a charged particle stream running between Jupiter and Io on the planet's magnetic field) to capture and convert a tiny portion of that energy into microwaves which are then beamed to test colonies for use. Although the microwave beam is dangerous, the promise of more usable power is an irresistible draw for the Jovian government and private contractors.

The second of Jupiter's Galilean satellites, Europa, provides much of the water used in the Confederation. Covered in its entirety by a ten kilometer thick sheet of ice overlaying a worldwide water ocean, Europa has few permanent residents. Most people stay for a few months at most to work at the water-processing stations that dot the surface.

Several scientific stations are also on the satellite, eagerly searching the depths for signs of life using ultrasound scans. Europa, with its water oceans and geothermal activity, theoretically supports the minimal requirements for life as we know it.

Ganymede is the largest moon in the solar system, and is the home of the Confederation's largest non-space borne colony. Nearly fifty thousand people inhabit the various mining towns and processing stations that exploit Ganymede's rich mineral and water resources.

Callisto, the outermost of the Galilean satellites, is primarily a mining and water-processing colony. A small Inter-Settlement Geographic Society observatory is also located there.

▼CULTURE

Relations between states are friendly but tinged with elements of cordial rivalry. Residents of Vanguard Mountain (the "leading" Trojan state) and Newhome (the "following" Trojan state) are regarded as country hicks by the inhabitants of Olympus. In turn, Olympians are thought of as imperialistic militants, and are ridiculed for their state's pretentious name. The fact is that the residents of the three states have few real differences between them, most of which are minor things such as the slight twangy accent of Vanguardians or the use of a few chosen slang words by Olympians.

The Confederation boasts the largest space-based population of all the solar nations. This is remarkable since most Jovian colonies are of the windowless "Vivarium" type. The Vivariums' greater interior surface area allows these colonies to theoretically support nearly twice the population of standard cylinders. However, the massive shielding necessary for life around Jupiter reduces the Jovian stations' habitable volume in comparison to their in-system counterparts, with a corresponding drop in population capacity.

The largest Jovian station is the capital of Elysée, which has a population of about five million. The other two hundred or so Jovian colonies are smaller, quickly built during the Confederation's growing years to support its burgeoning population. Although everyone has a place to live, many Jovian citizens are beginning to think that building colonies at a faster pace will increase the quality of life for all Jovians. Unfortunately, the energy expended on the military and on simply keeping the currently operational stations in working condition precludes this otherwise desirable use of time and money.

Real estate aboard Jovian stations is extremely expensive, and as a result most citizens can only afford small but comfortable quarters. The cramped living spaces on the Jovian stations are compensated by the excellent public gardens and parks provided by thoughtful designers. Jovian society has retained the hardworking attitude of its founders, so one's home is often little more than a place to sleep. Nearly all Jovians spend their waking hours either at the workplace or with friends in public places. They eat and sleep at home, but do little else in their quarters. This tends to crowd public areas, and unsuspecting tourists are often overwhelmed by this situation.

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Despite living under some of the most cramped conditions in the solar system, the Jovians have developed an open-minded, easygoing facade which contrasts sharply with the barely restrained tensions elsewhere. The Jovians have adapted to the relative lack of privacy in their lives by maintaining a friendlier and more tolerant attitude toward one another. Recent generations of Jovians, born and raised in the colonies, seem to have fewer difficulties with close quarters than the first Confederation citizens did.

Despite the fact that cramped conditions often force people of very different income brackets to live very close to one another, class distinctions do exist in the Confederation. Although government policy forbids buying more spacious housing, the Jovian upper classes are easily able to afford personal yachts and other luxuries which set them apart from their poorer compatriots.

Although Jupiter has retained English as its primary language, much of the population is also relatively well versed in French. This is largely due to the work of Elisabeth Bisset, an early colonist-turned-poet whose diaries and poems about the outer solar system are regarded as the Confederation's finest works of literature. Bisset was part of a significant number of French and Franco-African miners sent to Vanguard Mountain. Her works led to a certain Francophile sentiment among the Jovian upper-class and quickly entered the education profile. Today, nearly all secondary school students study French for several years and read the classics in their original form. French remains the standard language of art in the Confederation. Earth is the only other place in the solar system with a substantial French-speaking population.

The Jupiter settlements developed from remote mining colonies to one of the solar system's superpowers in little more than a century. The large immigration of wealthy, well-educated colonists resulted in a free-thinking if a bit carefree society. The overall level of education is fairly high, mainly due to the large proportion of immigrant scientists and technicians. Education is encouraged and easily accessible, most often though automated teaching programs (and human counselors for guidance) that adapt themselves to the students' abilities. The result is a broad cultural base. Most Jovians are capable of sustaining long, intelligent conversations on many difficult topics. Most Jovians are unfortunately aware of that social characteristic, and several citizens have acquired a pedantic streak, earning the aversion of some of the less-educated societies of the solar system (such as the Nomads or CEGA).

Jovian society, over the last few decades, has become daringly liberated from sexual taboos, and this has earned Jovians a reputation for loose morals and perversity. Nothing could be further from the truth, however. Jovian citizens have simply eliminated much of the shame which surrounds the physical expression of love, and have in fact tried to teach others in the solar system that repressing their natural instincts only leads to violence and dysfunctions. While Jovians like to dress lightly, however, they are no more promiscuous than anybody else.

The current generation knows little of the hardship of the first few decades of the Confederation, and most enjoy their wealth without thinking much of the blood and sweat that brought it into being. Older people tend to scorn at this, and proffer constant warnings that go unheeded. Living space is rather restricted, but there's plenty of water, air and food for everyone, plus a great deal of resources left over. As a result, Jovians are fairly considerate of their peer's need for privacy, but they are wasteful of their resources. Jovian tourists are notorious for their littering and little regard for the environment.

Jovians have a poor understanding of what it means to be a destitute, and have developed some arrogance about their own wealth. They are often judgmental of other societies who have not managed as well as they have with their limited resources, and believe that individuals who are broke are fully responsible for their misery. Society, they claim, can only do so much for people, and those who don't succeed should ask for help or try harder. This philosophy, however, is not apparent at first. Jovians usually appear sociable and sympathetic until the topic of poverty is brought up.

◇ THE TROJAN STATES

The Trojan States lie far away from the rest of the Confederacy, but still retain strong cultural bonds with the rest of the Jovian citizens. They share their wealth and carefree attitude about life, enjoy similar benefits and face much of the same restrictions. They have some military outposts to support the Jovian forces patrolling their area of space, but are hardly militarized themselves.

Vanguard Mountain Station is the oldest settlement found at the L4 point of Jupiter's gravity well. It was constructed through the hollowing out of a one of the largest asteroids in the cluster. After centuries of additions, Vanguard Mountain Station now resembles a mass of metal spires with their heads held together by a large ball of metal and stone. The rest of the Vanguard Mountain state is comprised of many small stations, most built directly out of the hulk of an asteroid and a few based on the standard Jovian Vivarium-type colony cylinders.

Newhome is the youngest member of the Confederacy, and as such has not fully adopted the psyche of the other two Jovian states. This manifests itself in two ways: one aspect is found in the overachievers who drive the culture of this Trojan state forward and volunteer for military duty with zeal, while the other is of those people who try to maintain their own ideals and mannerisms in an evolving society.

The Trojan States have to be self-reliant, as they don't have Jupiter and its moons nearby to provide a seemingly unending flood of raw material and energy. Despite their great mineral wealth, they must trade for their water and volatiles and spend much time building and maintaining solar collectors. Hard work is thus seen as a virtue, much more than in Olympian society. In this respect, the Trojan settlements have an outlook on life that is somewhat closer to the Nomads. Being the equivalent of "provincials," Trojan citizens are much less arrogant about their achievements as are Olympians themselves. They appreciate Jovians and cheer at their victories over CEGA, but remain prudently neutral about their own military involvement, which is far from being significant in any case.

Despite being seen as country hicks by the Olympians, the Trojans actually enjoy high standards of living and education. Information travels freely between the States, and the Trojans are just as eager as their Olympian cousins to find activities to escape the claustrophobic confines of their homes. One particularly popular hobby is that of space bike racing, using bikes equipped with pedal-powered ion engines. Several media follow the weekly exploits of the crowd's favorite bikers, and many ambitious teenagers can't wait to get their shot at fame and glory.

▼ POLITICS

Each Jovian station is self governed by a chamber of representatives. A council of representatives is elected from the general populace of each colony every few years (the actual number varies from station to station). A separate representative is sent to the state capital, to speak for the station as a whole.

All three Jovian states have their own local government, which manages activity and commerce within the state's boundaries. International affairs and matters that involve all three states are handled by a ruling council known as the Agora. Representatives from each state are sent to the Confederation capital of Elysée to serve on the Agora.

A president is chosen by general election every seven years to supervise the Agora and represent the Confederation. The current president is Alexandra Itangre. Since her election in 2204, she has been the source of many controversial decisions; to her credit, all of these have proven beneficial to the Confederation. In particular, her insistence on increased military spending in lieu of more colony construction is now regarded as a brilliant example of forethought, especially in the wake of CEGA's recent aggression.

Many Jovian observers have come to realize that power in any form is their President's greatest pleasure. Already one of the richest people in the Confederation, she continues to make money from her corporate holdings and searches for ways to remain in office. Her efforts to gain more control over the Agora are tolerated by the people, however, because her actions always seem to have the good of the general populace as their motivation. Some are not so certain of President Itangre's altruism, however, and wonder how long it will be before she exceeds her limits.

▼ SCIENCE AND MILITARY

Jovian science is perhaps the most advanced in the solar system. The struggle to build a civilization from scratch in a hostile environment, coupled with subsequent military development, has resulted in a large number of innovations in the field of engineering; not the least of which is exo-technology. Jovians place great emphasis on education, believing that a knowledgeable nation will be less prone to the sort of insane warfare that devastated Earth. As a result, the Jovian population includes a large number of government-supported research scientists and engineers.

The Confederation possesses a large military force, most of which originated after the loss of formal contact with the inner solar system. The Jovians wanted to place themselves in a position of power in order to provide a serious deterrent to any possible foreign aggression. The large military was necessary to counter Earth's huge navy as well as to effectively patrol the vast amount of space claimed as its own by the Confederation. Much of the space between the states is devoid of any military presence; most patrols are ordered around the refueling stations.

The Jovian Armed Forces (JAF) is composed entirely of volunteers, a remarkable feat for such a large army. This is attributable to the high patriotism of the average Jovian citizen coupled with the JAF's skilled public relations officers. The preliminary screening process for the JAF is a grueling test of determination and courage that few of the thousands of annual applicants pass. Those who do manage to be accepted are sent to training camps. Recruits who show exceptional promise are earmarked for Officer Training School, which they attend concurrently with the standard training scheme. Officers take much longer to finish their military education, but end up much tougher. Once a soldier's basic training is complete, he (or she) is assigned to one of the three sub-armies of the JAF. Further training takes place there, since all JAF personnel are cross-trained to some extent to increase their flexibility.

The military is an integral part of Jovian society. Soldiers are permitted great freedom in choosing outside work and the length and time distribution of their tour of duty, making military service a popular choice for young Jovians. The resulting financial aid and the fact that Jovian companies show a preference for applicants with military service also help to increase the pool of applicants for the JAF. Nearly half of all secondary school graduates in the Confederation apply for acceptance into the JAF. Although pacifists in the Confederation regularly protest this heavy focus on military service, they can offer no alternative that will draw so many of the Confederation's best and brightest minds.

From a wartime standpoint, the distance between the Jovian States is more than a simple escort problem; it is a logistical nightmare. Jovian strategists have long known that should war break out with the inner solar system, they would be forced to fight on three fronts. Each state would be effectively isolated from the others. Their solution was a patchwork measure meant to last until a better alternative could be found. The Jovian Armed Forces (JAF) were split into three separate armies of equal size, labeled Alpha, Beta and Gamma Divisions. Alpha Division was assigned to protect Vanguard Mountain, Beta was assigned to Newhome and Gamma was to protect Olympus. A headquarters, Khannan Base, was established in Olympus, but each Trojan State also had its own command center. In this way, each part of the Confederation would be able to hold its own in the event of an attack.

The inherent weaknesses of this defense meant that the strategists had to plan for a proactive role, as well. The result was an invasion fleet of several carriers and battleships that could, at a moment's notice, swoop into the inner solar system to take the battle to the enemy. This invasion force was also distributed evenly between the states; should one state fall, the others could still avenge it.

Each sub-army is divided into battle groups of warships and squadrons of auxiliary craft. The organization of squadrons varies, since the Jovians freely mix exo-armors, conventional space fighters and exo-suits for increased flexibility. Squadrons are divided into flights of two to ten units. Battle groups are organized around carriers. Smaller ships are frequently transferred between battle groups, but stay with their original Division until they are decommissioned or destroyed.

Although the modern situation is not as dire as the early Jovians had feared (Mars and the Belt have not fallen under the sway of Earth), it still warrants the maintenance of the JAF's constant state of readiness. New ships are still being built, most of which belong to the "invasion fleet" cat-

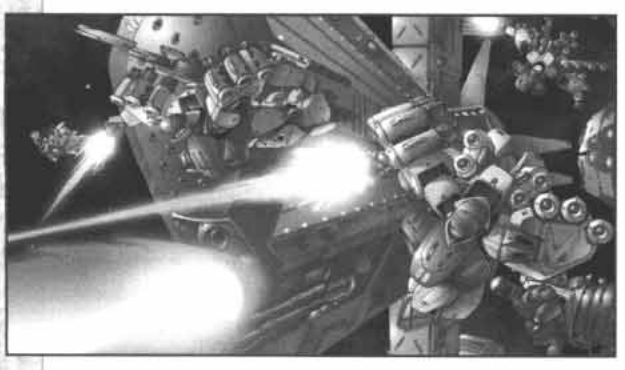
egory of warship. Most notable among these is the JSS *Godsfire*, a super carrier more than a third of a kilometer in length. More ships of this class have been laid down in the shipyards of the Trojan States, causing much consternation in the inner solar system, where many now fear a preemptive assault from a nation that once dreaded the same thing.

▼COMMERCE AND INDUSTRY

Most of the Confederation's major manufacturing industries are located in the Trojan States, where raw materials are abundant and easily accessible. The notable exception is Joshua's Station in Olympus, which is the second largest station in the Confederation and a major producer of electronics. Joshua's Station is a major trading center, serving as a port for the ships of the Mercurian Merchant Guild, which bring Jovian goods to the inner solar system. The station is also home to the famous Jovian Armor Works corporation (JAW).

Olympus' main export industry is gas mining from Jupiter, accomplished with the use of hundreds of automated skyhooks which skim hydrogen and helium off the top of Jupiter's atmosphere. Giant unmanned barges then send this fuel to locations across the solar system. Olympus is also the Confederation's major source of water, supplying the Trojan States with water collected from Europa and Callisto.

The prime resource of both Trojan states is the clusters of asteroids that are captured by the powerful combined gravity effects of Jupiter and the Sun. Most of the Confederation's major manufacturing industries are located in the Trojan States, where raw materials are abundant and easily accessible. This mineral wealth is also traded with Olympus for water and volatiles skimmed from Jupiter and its moons.



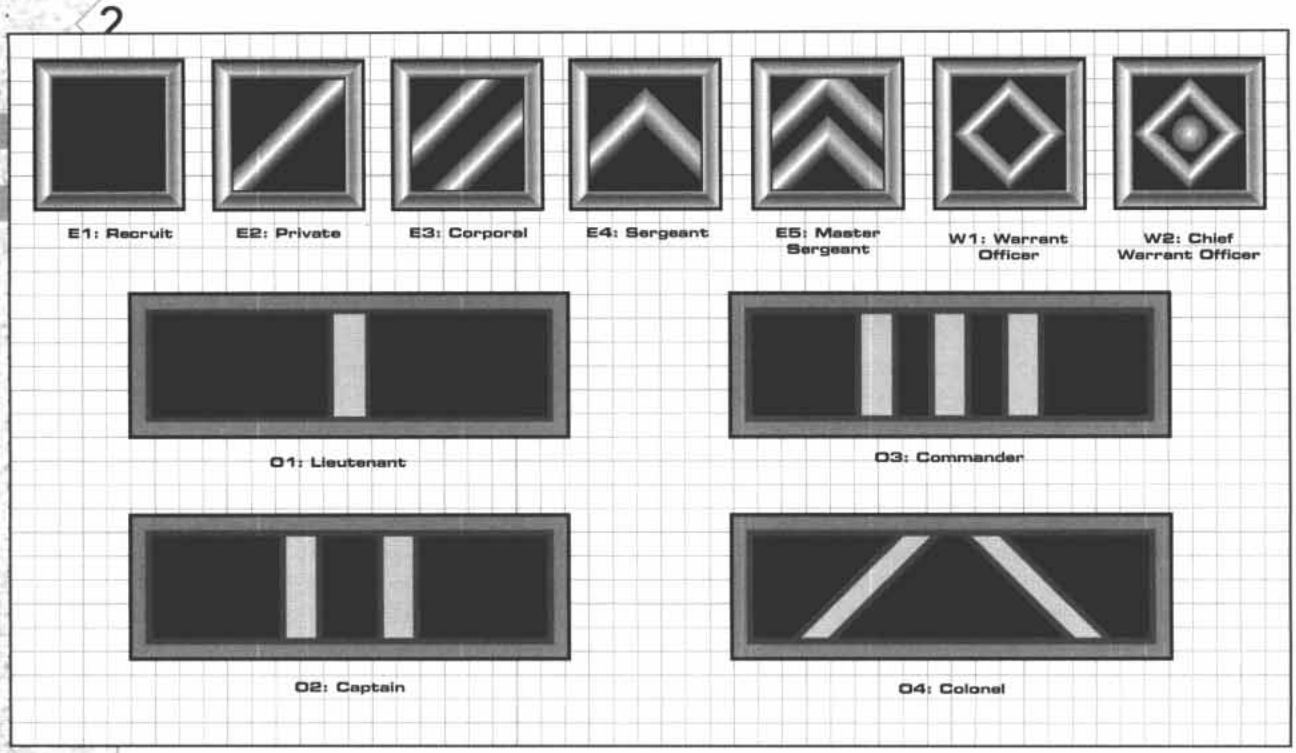
KNIGHTS IN SHINING ARMOR

Although all three JAF divisions are supposedly equal, observers note that since 2204, newcomers to the ranks have most often been assigned to Gamma Division. Most individuals eventually leave Gamma upon promotion, save for the best of the pilots (who then serve to shepherd the next batch of rookies).

This "newbie policy" is a drastic change from the previous arrangement, in which each Division was assigned to one Jovian State. The change suggests that Jovian High Command has formulated a new strategy by which the Confederation will defend its three states. Curiosity runs high in military intelligence circles throughout the solar system. The attack on Elysée is still fresh in the minds of everybody, so it is a mystery as to why the Confederation is sending all of its veterans away from the capital.

Gamma Division supports the largest number of exo-armors in the service. Twelve squadrons are made up solely of high-tech wonders, and new designs from JAW are almost always tested by Gamma Division personnel. This, coupled with the fact that Gamma Division retains for itself the best JAF pilots, lends the division something of a "Top Gun" aura in the public eye. Each of the twelve exo-armor squadrons has a distinct history and personality, from the easygoing camaraderie of the Jovian Flying Circus to the comically sinister Assassins. All twelve squadrons are media darlings, however, and there is a constant battle among new rookies to be chosen for permanent assignment to one of the squadrons.

Up until 2210, Gamma Division was commanded by General Avram Thorsen, the now-infamous Traitor of Elysée. His resignation has left Division morale at an all-time low and opened a power vacuum which has yet to be filled. Until a new division commander is selected, nominal control of Gamma Division falls to Khannan Base Commander Konrad Koudriopoulos.



▼ RECENT DEVELOPMENTS

Even though the Jovian Intelligence Service continues to scour the solar system for the perpetrators of the attack on Elysée, much of the mystery surrounding the Odyssey Affair has been cleared up (as far as the public is concerned) by the exposure of General Thorsen as a traitor. Although his motivations remain unclear, he has confessed to allowing the CEGA attack fleet to enter Jovian space unchallenged. He denies, however, knowing what Admiral Kleb planned for the capital. His most notable crime is his "overlooking" of the Venusian floater-poachers that started the Odyssey.

The Agora has quietly granted a select group of scientists a large amount of money, several floater specimens, and a mandate to find out if the special properties of the beasts can be copied en masse. There are two hopes which have brought this about, one being the successful completion of the project with the attendant benefits; the other is the chance that duplication may be proved as unfeasible, which will give the Agora further political clout against the "heartless Venusian exploiters" who have been hunting the floaters.

Also unpublicized is Thorsen's subsequent ruthless endangerment of four Jovian citizens whom he had sent to Venus instead of a team of trained operatives. He did this in the hopes that they would be quickly eliminated which would subsequently end any further investigations into the Venusian activity on Jupiter. Those unwitting pawns, Madeleine Koudriopoulos, Adrian Allen, Roxanne Fujima and Nicholas Holly, survived their extraordinary trek across the solar system and their involvement in the Battle of Elysée. As a result of their actions, these four have become national heroes. The Jovian populace is comfortable with the official cover story — that the four were tourists caught in the wrong place at the right time. Further comment from the heroes is unavailable, however. The three members of the JAF were quickly promoted and are now on "indefinite leave" in an undisclosed location, and Fujima is as close-mouthed now as she was before the incident, despite receiving much public acclaim for her current work as a news-vid anchor.

Those in high offices in the Jovian government (President Itangre in particular), however, are well aware that the corruption and heroism of the preceding months go far deeper than the figureheads which have been presented to soothe the hearts and minds of the masses. Khannan Base Commander Konrad Koudriopoulos, enraged at the treatment of his daughter, has initiated a series of comprehensive security checks in an attempt to root out any further traitors in the military, although these have proven difficult to enforce with any degree of efficiency due to the massive flow of traffic through Khannan Base.

President Itangre, devastated by the betrayal by her oldest friend, has withdrawn into her duties, distancing herself from friends and family. She has demanded, and received, more funding for the JAF from the Agora. Due to her acquaintance with General Thorsen, Alexandra was subjected to a grueling interrogation (as were all of Thorsen's friends) for security reasons, which has soured her mood even more. People who know the president advise others to enjoy her absence while they can; when she comes out of her funk, they say, she will be on the warpath, and woe betide anyone who doesn't jump when she tells them to.

THE GREAT MYSTERY

The greatest wonders of scientific discovery in the history of humankind, the Jovian floaters, are also the greatest mystery. Floaters resemble giant gas-filled jellyfish which drift in the upper atmosphere of Jupiter. These creatures use the same system of biochemistry as life on Earth and could not normally have evolved on a world with no surface and high radiation levels such as Jupiter.

The greatest bafflement centers around the multipolymerase protein produced by the floaters, so named because of its inexplicable ability to repair damaged DNA and RNA strands, regardless of the type of damage undergone. The existence of this protein threatens to shatter the foundations of all modern life sciences. Every known rule of cell biology has been violated by this polypeptide that seems to work on all life. It is possible that such a protein could be harnessed to eternally prolong the existence of a given cell, theoretically conferring eternal life. These findings have caused all research concerning the floaters to be classified top secret. Only a few Jovian and Venusian researchers share all the current known facts about them.

The floaters have been declared a protected species by the USN and, save for a few research stations, all entry to the creatures' herding airspace is blocked by JAF patrols. The existence of the floaters has forced the scientific community to revise their theory on the possible origins of life. Researchers have intensified their efforts to find alien life forms in the dark waters of Europa and other locales.

JOVIAN ARMOR WORKS

Jovian Armor Works is the best known aerospace company in Jovian Space, producing all of the JAF's exo-armors in addition to many types of weapons. Founded in 2155, JAW has gained a reputation for reliability in all of its products. JAW's current CEO is Robert "Lil Bob" Hewer who inherited the position from his father. Where the elder Hewer was a loud, boisterous bear of a businessman, his son is an introverted engineer who is far more interested in building exo-armors than selling them. What this attitude bodes for the company has yet to be seen, as JAW's stock remains quite stable.

JAW's R&D department, unofficially known as the Skunk Works, is the JAF's premier contracted think tank. Its restricted research and testing bays on Joshua's Station are strewn with works-in-progress, often prototype exo-armors fitted with the latest in potentially useful gimmicks. Most of these experimental exo-armors have been struck by the so-called "Curse of the Skunk," by which an untested, one-of-a-kind prototype is somehow thrust into a combat situation and returned to JAW as a wreck.

Most longtime Skunk Workers have accepted the Curse as a fact of life, fitting each new prototype with extensive data recording suites in order to gather as much performance information as possible from the exo's inevitable fate. The latest of the "Cursed" was the Prometheus, used by Madeleine Koudriopoulos during the Battle of Elysée to counter CEGA's Dragonstriker (the remains of which now secretly occupy the Skunk Work's crash investigation hangar). The remarkable performance of the Prometheus (despite its expected dismemberment) has resulted in the construction of several new Prometheus-class prototypes, each built to be superlative in one particular combat role. Considering the Agora's renewed interest in military research, the Skunk Work should have no trouble getting funding for these and other projects.

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◇ THE NEW OLYMPIANS

The inhabitants of the Jupiter settlements have often been condemned as smug and arrogant, but they have many reasons to be proud of their achievements. They live in one of the most breathtakingly beautiful and inhospitable regions of the solar system, yet have harnessed both its power and resources to supply them with almost unlimited wealth. Their position, furthest away from the Sun and remote from the rest of the human-inhabited inner system, provides them with security and might. Jovians as a whole form a prudent nation, sometimes to the point of being paranoid. They display an uncanny ability to be prepared for anything and everything, sometimes investing far too much energy in covering remote possibilities. While this would be a strain on anyone else's resources, the Jovian Federation is no pauper, and literally wastes a good percentage of its budget on strengthening its assets, be they military or economic. As it is, Jupiter's military might surpasses that of any other two nations combined, but it covers such a wide patrol area that some suspect it might not be able to withstand a concentrated attack.

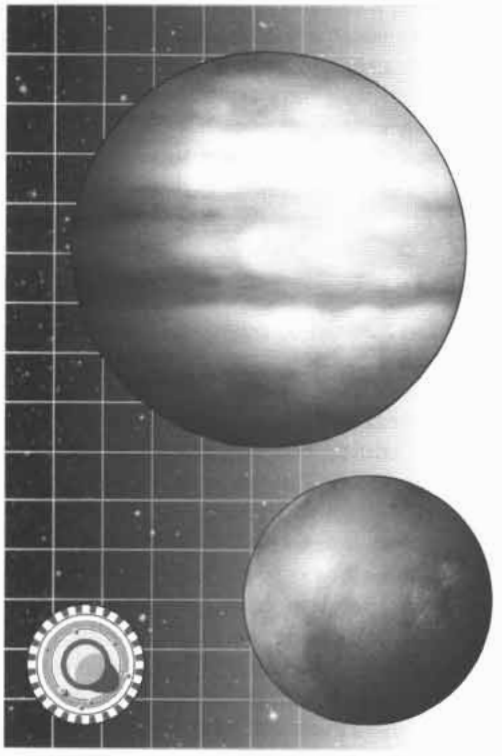
ON TOP OF THE GRAVITY WELL

As the title of the game suggests, the Jovian Confederation is the "default" starting point for characters and campaigns. It offers a wide range of possible character types as well as many different environments to explore.

Jovian player characters will live in one of the most technologically advanced and pleasant societies in the solar system. The government is not very heavy handed internally and the standard of living is generally high. Players should give some thought, however, to the darker sides of Jovian life. The battle of Elysée has convinced many that the confederation should become more active on the interplanetary scene and the JAF has been flexing its muscles more and more. Player characters should also choose which one of the Jovian states (and stations) they hail from. Those from Elysée will be used to a great deal of intrigue and politicking, while a native of Vanguard Mountain may have a more working-class outlook. Jovians who live on Ganymede, Callisto or Europa present an interesting alternative. Rugged explorers, miners or scientists, they may feel alienated from those who live in the vivarium colonies and who often do not consider them "real Jovians."

Gamemasters bringing players to the Jovian Confederation should emphasize the wonders of life around Jupiter. The Confederation is home to libraries, parks and luxury accommodations that Nomads may never have seen before. Intrigue is also abundant and GMs could involve the characters, perhaps in smuggling a prototype out of JAW Skunk Works. The armed forces are also an increasingly important part of Jovian society and can serve as the center for many plots in the Confederation. PCs who arrive as traders may find their vessels searched or detoured for security reasons, or could get caught in a battle. The Jovian diplomatic corps is another useful plot element. Ambassadors dart across the solar system and diplomatic packages are ferried through more or less reliable channels. Such a package falling into the hands of the PCs could launch a scenario or even a campaign.

▶ SATURN AND TITAN



SATURN

Distance From Sun:	1,430,000,000 km
Revolution Around Sun:	29.5 years
Rotation:	10 hours, 39 min
Diameter:	120,540 km
Density:	0.9 x that of water
Mass:	5.69 x 10^{23} metric tons
Average Surface Temperature:	-140° C in upper clouds

TITAN

Distance From Sun:	1,221,900 km
Revolution Around Sun:	16 days
Rotation:	15.94 days
Diameter:	5,150 km
Density:	1.9 x that of water
Mass:	1.35 x 10^{20} metric tons
Average Surface Temperature:	-175° C
Atmosphere:	92% nitrogen, 8% methane
Hydrographics:	55% hydrocarbon seas
Population:	40,000
Primary Exports:	Complex hydrocarbons, specialized food
Primary Imports:	Technology

▼ OVERVIEW

Titan, the largest moon of Saturn, is a frigid world enveloped in mysterious, red-orange clouds. It revolves in near-total darkness around its giant parent, a billion kilometers beyond the asteroid belt, making it by far the most remote human settlement in the solar system. Only the lure of vital resources — and profit — could have convinced human beings to establish a foothold in such an inhospitable location, and Titan offers both in abundance. Its icy crust is covered by huge seas of organic chemicals (mostly ethane), the only natural "oceans" in the solar system beside Earth's. This liquid wealth is lifted out of Titan's light gravity well to mighty orbiting refineries, where it is converted into valuable compounds and shipped for sale throughout the solar system. Though Titan is nominally international territory, the main colony is under the control of a Jovian company, THC. Many of its inhabitants are often just temporary, lured to the cold reaches of space by the rewards of hydrocarbon mining in the depth of the moon's oceans. Such a hard life requires hardy, tough people, and most Titanians are just that.

Saturn also supports a small population of scientists who monitor and maintain the automated research stations that orbit each jovian nation. The current permanent population of explorers numbers about four hundred and is located in two Inter-settlement Geographic Society (IGS) sponsored bases.

▼ CULTURE

Titan's population is small, and almost wholly devoted to the economic exploitation of the ethane seas. Titanian society is a 23rd century version of the "company town," where every aspect of life revolves around the Titanian Hydrocarbon Corporation (THC), the powerful Jovian firm which manages the exploitation of the Saturnian system. Most of the 40,000 Titanians live in Station T, the oldest and largest of the moon's four orbital colonies. Personal quarters are spacious, since the station was designed with future staff expansions in mind. The company's headquarters are located on the Silver Tower, a smaller energy-generation station surrounded by executive quarters.

The Titanian mining settlement is a lonely, isolated place. Its inhabitants are months away from the rest of humanity, and even messages are hours out of date. This creates an atmosphere of loneliness that tends to encourage people to form family-like bonds with fellow workers. Those "employees" who spend more than a few years on Titan tend to think of themselves as Titanians rather than Jovians (or whatever nationality they originally were) because of the strong ties they form with their fellow workers. In a hostile environment such as that of Titan, bonding with people who are close to you and whose actions may save your life is far more important than any national attachment. As a result, Titanians are seldom prejudiced and only judge people based on their work attitude and ethics. Many also develop hobbies to fill the long hours. Titanians are reputed to be skilled ad-hoc artists, with a high proportion of painters and musicians among them.

Titanians don't have much of a fashion sense, however. They live far from any cultural center and pay little attention to what they wear, as long as it's clean and without holes or tear. They don't have access to fashionable clothing in general, although the occasional Mercurian merchant can drop by and make a fortune by selling some fine clothing to the fashion-starved mining colony. In general, any foreign art and entertainment is greatly appreciated by the workers.

The major division in Titanian society is between those who work in the surface collection coastal bases and those working in the orbital station. The space-dwelling "drifters" enjoy a better social status and perks, but the ground-based "lifters" consider themselves the true force behind THC's success. Both lifters and drifters are level-headed, practical and acquisitive. They have opted to undergo temporary deprivations in order to return home as rich men and women after their two-year stint. Some are enthralled by the "frontier" way of life and opt for longer residencies — these are the ones most likely to be called "Titanian" by others. Most of the workers are of Jovian origin, though they are also a fair number of Martian and Mercurian employees.

The inhabitants of Alcott and Stevenson (the IGS bases on Titan and orbiting Saturn, respectively) are a tolerant lot, more interested in observing nature and making discoveries than in proving whose home nation is better. By common agreement, English is the official language, although the large cross-section of cultures in close quarters has resulted in the adoption of words and phrases from a dozen different tongues. Neither is religion an issue: a sparsely-furnished chapel is available for use, and as far as religious dogmas go, the researchers have adopted a policy of tolerance. A research director is assigned by the home office every few years to supervise the upkeep of the bases as well as oversee the various ongoing scientific experiments.

▼ POLITICS

Since THC is a Jovian corporation, the orbital colonies and the extraction bases on the Titanian surface are considered "overseas" territories of the Jovian Confederation. Titan itself is international territory, of course, but THC treats the moon as its private property. This has led to increasing tensions as THC gradually spreads its influence, ferrying vital resources to the Confederation and its allies and threatening to bankrupt numerous inner system chemical companies. In a recent speech, CEGA councilor Balthus Ashita denounced the exploitation of Titan as "an instrument of economic warfare," and pushed for several quota restrictions and increased import fees.

Titan's de facto ruler is Bernardo Chandrasekhar, the visionary, 59-year-old CEO and majority shareholder of THC. Company policy is decided by a 21-member Board of Directors (subject to Chandrasekhar's unofficial veto), while day-to-day life on Station T lies in the hands of a small council of elected delegates. These are called "tribunes" by many employees, who privately refer to Chandrasekhar as "the Emperor."

▼ SCIENCE AND MILITARY

Titan is a system-wide leader in chemical engineering and pharmaceutical research. Despite the isolation, a sixteen days tour of Saturn has become a sought-after plum for many of the solar system's brightest young researchers. Titan has no formal military force, but THC's Corporate Security Division (CSD) has Confederation police powers. The CSD is equipped with modern light exosuits and aerospace craft, many of which are modified for the rigors of Titan's atmosphere.

Several life-support and recycling innovations created by the base crews have been successfully marketed in the inner solar system, providing some friendly competition for Nomad inventors (several Saturn base crewmembers are, in fact,

Nomads themselves). Although profits from their work are funneled immediately back into research funds, the base crews are pleased by the fact that their inventions acquired a widespread activity.

▼COMMERCE AND INDUSTRY

Regular technology shipments from Jupiter keep THC's twin refining stations Demeter and Aesclepius operating at peak efficiency. Using patented high-energy synthesis processes, the factories convert Titan's ethane, water ice and nitrogen into rare compounds for a fraction of the cost incurred by Venusian and Terran firms. Plastics, drugs, lubricants, resins, synthetic foods and liquid fuels are just part of THC's wide range of products.

Most of the finished chemicals are shipped in massive, temperature-controlled cylinders to the Confederation and the Martian Free Republic. The Martian Federation and the Mercurians are also important customers. In addition, THC recently signed several long-term contracts with settlements in the Orbital habitats, despite CEGA's attempts to scuttle the deal by imposing taxes on imported organic products.

▼RECENT DEVELOPMENTS

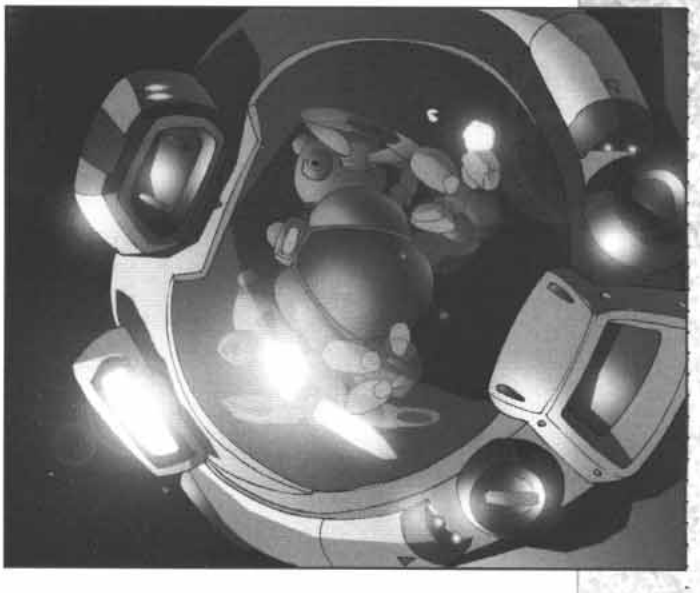
Since 2209, there has been a sharp increase in pirate attacks against THC's transports. In the last nine months, one tanker has been crippled and looted in the Belt, and three others have been damaged. Chandrasekhar has considered requesting JAF escorts for his shipments, or even a JAF base in the Saturnian system. President Itangre, however, has advised him that such a move would play directly into the hands of THC's enemies in the current political climate.

The events surrounding the Odyssey Affair have failed to produce any real tensions among the base crews. More prevalent is a general sense of exasperation with governments in general. Why, they think, can't everyone just grow up and concentrate on science and the betterment of life? The various governments have not tried to exert any influence on the Saturn bases yet either; as far as they are concerned, the outer planets are too far away to be of any political.

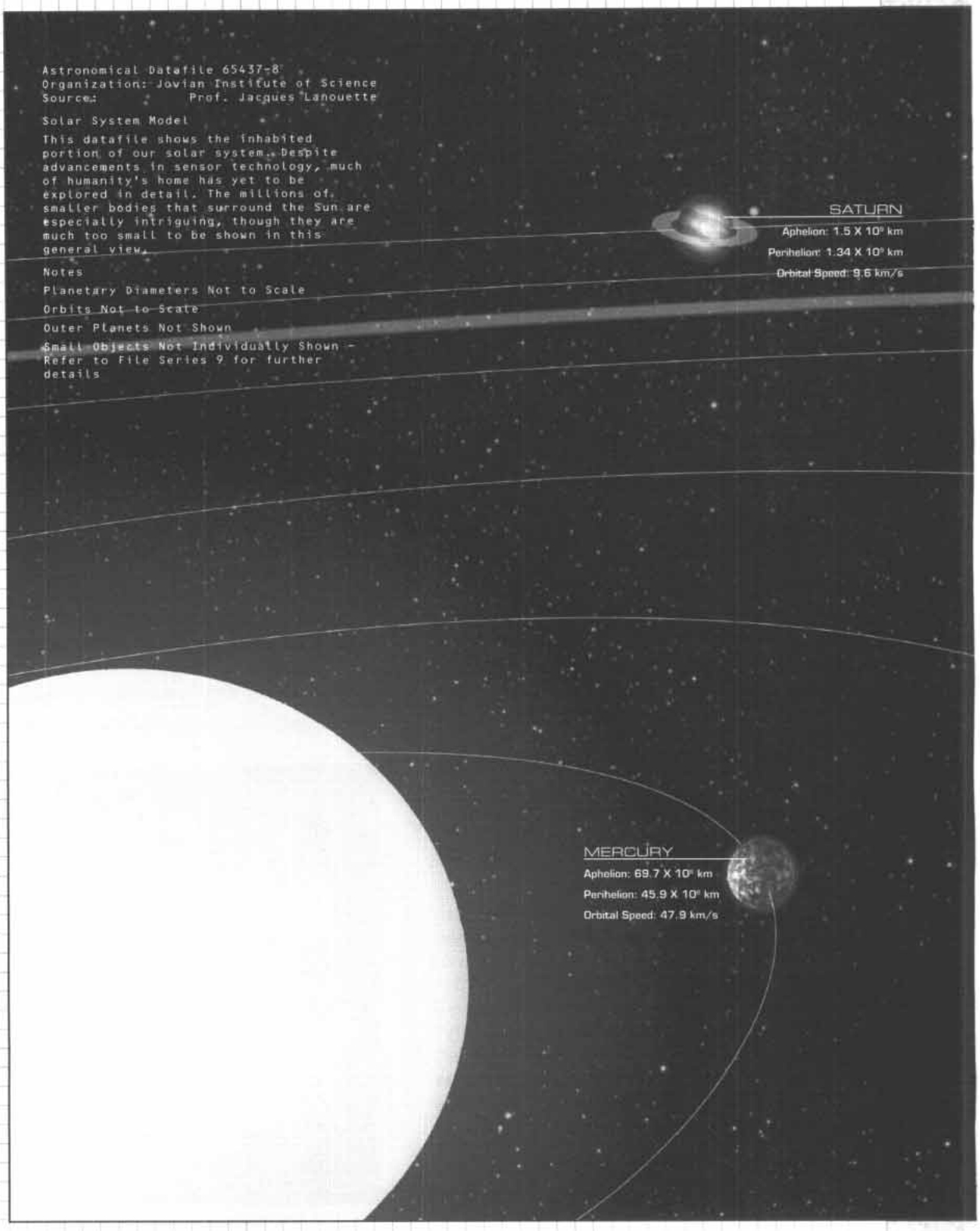
LIVING IN THE FROZEN SEAS

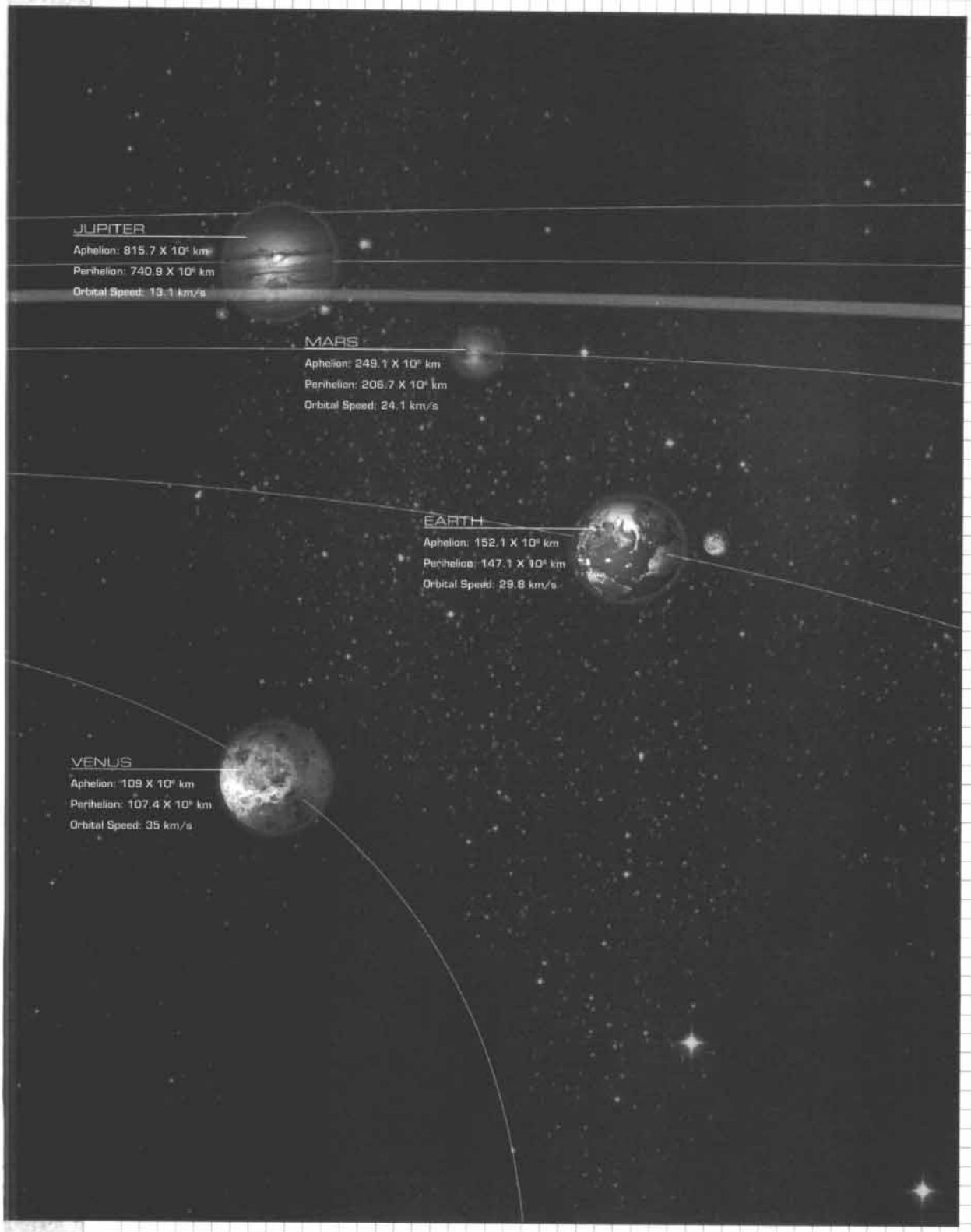
Titan lends itself well to adventures "on the frontier." When you're living this far away from civilization, you can't just hop on the next ship to avoid problems — you have to deal with them as they come. As a result, any character that has some Titanian experience in his background is likely to be strong willed and very capable of taking care of himself. THC employs a wide range of people, from the hardy miners that perform the actual collecting and refining of the raw materials, to the pilots and crew that man the shuttles and tugs, to the meek accountants taking care of the numbers end of the operation. These are all valid professions which the players can choose from, and which can generate their own sets of adventures.

Titan cheaply supplies bulk hydrocarbons to the rest of the solar system. A good Earth analogy would be the various Alaska settlements, or the drilling platforms located in the North Sea. Most of the adventures taking place there will be of the "cabin fever" variety — stuck in a small place with people who disagree (perhaps violently) with you. These run the gamut from catching a saboteur hired by a rival corporation to surviving a terrible accident on the shore of the methane sea. Anything new and fresh can become a cause for dissent among co-workers.



2


Astronomical Datafile 65437-8
Organization: Jovian Institute of Science
Source: Prof. Jacques Lanouette
Solar System Model
This datafile shows the inhabited portion of our solar system. Despite advancements in sensor technology, much of humanity's home has yet to be explored in detail. The millions of smaller bodies that surround the Sun are especially intriguing, though they are much too small to be shown in this general view.
Notes
Planetary Diameters Not to Scale
Orbits Not to Scale
Outer Planets Not Shown
Small Objects Not Individually Shown - Refer to File Series 9 for further details
SATURN
Aphelion: 1.5 X 10⁹ km
Perihelion: 1.34 X 10⁹ km
Orbital Speed: 9.6 km/s
MERCURY
Aphelion: 69.7 X 10⁶ km
Perihelion: 45.9 X 10⁶ km
Orbital Speed: 47.9 km/s


JUPITER
Aphelion: 815.7 X 10⁶ km
Perihelion: 740.9 X 10⁶ km
Orbital Speed: 13.1 km/s
MARS
Aphelion: 249.1 X 10⁶ km
Perihelion: 206.7 X 10⁶ km
Orbital Speed: 24.1 km/s
EARTH
Aphelion: 152.1 X 10⁶ km
Perihelion: 147.1 X 10⁶ km
Orbital Speed: 29.8 km/s
VENUS
Aphelion: 109 X 10⁶ km
Perihelion: 107.4 X 10⁶ km
Orbital Speed: 35 km/s

CHAPTER THREE: ORGANIZATIONS

The solar system of the twenty-third century supports a vast number of corporations and interest groups, many of which have influence over the entire spread of human expansion. Some, like the Solar Cross and the United Space Nations (USN), exist to serve the need of neutral peacekeeping forces in the solar system, providing common grounds for healing or diplomacy. Others are shadowy secret societies who sustain humankind's age-old love of mystery and one-upmanship.

The organizations introduced in this section represent the merest fraction of human groupings. However, they do provide an adequate cross-section of the various driving forces behind the governments and peoples of the solar nations. The aforementioned Solar Cross and USN, as well as ZONet, are popular and highly respected organizations which draw their membership from the entire human race. SolaPol, STRIKE, The Venusian Bank and the Mercurian Merchant Guild are less permissive in their membership, and far less open to public scrutiny. The final group, the Intersettlement Geographic Society (IGS), is a purely scientific organization that wants nothing more than to be permitted to conduct its research in peace.

Recent events have forced many of these organizations to go against their basic ethos in order to keep up with the flow of politics. Specifically, the Solar Cross, USN and IGS are finding themselves pressured from all directions to choose sides in the upcoming conflicts between nations, while the Venusian Bank and other secretive groups are finding few alternatives to open actions and direct involvement in order to maintain their strong positions in the solar system's power structure.

▶ VENUSIAN BANK

The Venusian Bank is the largest Venusian Corporation and controls a staggering portion of the financial infrastructure of the solar system. It is richer than any nation has ever been. It virtually controls the government of Venus and stands as the true power behind the CEGA council. It would seem obvious that the Bank plans to continue expanding its wealth and power across the entire solar system. Few politicians know how to deal with the situation. The line between capitalist expansion and imperialist encroachment is thin at best.

The Venusian Bank is by no means a united house. Many of its high-ranking personnel are busy trying to undermine one another, thus hampering the Bank's efficiency.

▼ ORGANIZATION

The executive structure of the Venusian Bank is a closely kept secret. The main Board of Directors is based in New Tokyo, a sprawling arcology on Venus. A large portion of the city is sealed off from the rest of the arcology and guarded by Home Defense Force commandos. Only the Directors and their trusted support staff are allowed to enter this luxurious zone. The actual number of Directors and the definition of their power is unknown. At least four thousand individuals live in New Tokyo's restricted zone, but their names, ranks and relationships are a mystery. It is most likely, however, that a hundred or so of these people form the Bank's "high command." To date, no intelligence agency has successfully penetrated the Directors' inner sanctum.

At the head of the Bank is an enigmatic figure known as the Chairman (or Kaicho). The mystery surrounding his or her nature is complete. Many postulate an "inner circle" of ten or so individuals who use the identity of the Chairman to further shroud their own identity. Careful searches for evidence of the Chairman's existence have turned up nothing. However, no one fails to pay very close attention to missives with the Chairman's name on them. Real or not, the shadowy Chairman's word is law on Venus.

▼ CURRENT CONCERNS

The Venusian Bank is discreetly searching the solar system for scientists willing to violate the Edict prohibiting secret biological research. Several have been brought to Venus already, and are paid princely sums for their studies of the Jovian floaters. The Directors are growing impatient with the lack of breakthroughs. The recent discovery that the specimens are dying despite every effort to improve their viability has raised the stakes further.

The Directors are suspicious about the lack of public outcry directed at the Bank in the wake of the Odyssey Affair. The solar nations' anger appears to be directed solely at CEGA. The Directors can only assume that the solar nations are taking covert action. The failure of their intelligence services to turn up any agents in recent security crackdowns has only increased the Directors' paranoia. This feeling is clouding the Venusian society like the tension preceding a storm.

The Bank is currently scaling back many foreign-based projects, now leery of placing too much trust or power in the hands of untested pawns. They are also beginning to doubt the wisdom of provoking armed conflict. Now that the Bank is recognized as a major player, Venus has become a viable military target for both CEGA and the Jovian Confederation.

OPERATION METHUSELAH

Venusian Bank directors' disinterest in Jovian floater specimens turned to wonderment when scientists reported the lifesaving properties of the remarkable multipolymerase protein. Economic gain and the possibility of near eternal life led to Operation Methuselah.

Some Venusian Bank researchers protested the project, arguing the floater species might well be exterminated by such exploitation. They doubted the multipolymerase's ability to repair DNA damage was enough to overcome programmed cell death and the associated aging process. These voices were quickly silenced and replaced with more agreeable ones. The project proceeded with the financing of a state-of-the-art secret research station on Jupiter and with bribes issued to Jovian and CEGA government officials.

SolaPol was able to infiltrate the research station under the guise of rival investors. The Bank improvised a contingency plan and nuked the station from afar; but not before moving a dozen floaters to Venus.

▶ MERCURIAN MERCHANT GUILD

When the first Mercurians established their fledgling nation, they were concerned with the trade barrier imposed by their particular planetary location. Because of the planet's proximity to the sun, ships could only approach Mercury while hiding in its shadow. This limited the number of windows to Mercury and made it something of a chore for captains to plot solar navigation courses heading for the planet. As such, other solar nations rarely chose to visit secluded Mercury.

The Mercurians' solution was at once logical and innovative: why try to import trade when it was an asset Mercury could export? Up until that point, solar nations were mostly self-sufficient and spatial trade was sparse at best. The solar nations were rather surprised when, in the 2120s, they were jointly visited by ships affiliated with the "Mercurian Merchant Guild," and politely invited to participate in formal trade with the rest of humanity using the Guild's members as middlemen and couriers. Although some nations (notably the Jovian Confederation) were initially suspicious, the numerous prospective benefits earned the Mercurians the patronage of the entire solar system.

The Merchant Guild is Mercury's main source of income. It is extremely dependent on the cooperation of the solar nations; without the other nation's port facilities and financing, the Guild would be rendered powerless. This vulnerability is the source of the Mercurians' famed neutrality and their efforts to make allies of everyone.

▼ ORGANIZATION

The twelve official Merchant Princes who make up the Guild's board of directors are elected by all Guild members through a secret vote, and keep their positions for life. In fact, there are thirty such Princes. Additional Princes command outbound ships and act as formal delegates and embassadors. They trade places with their counterparts back home every year or so. This ensures that a full decisional council is always available at home while secretly keeping the Princes active in the business of the rest of the solar system.

The structure of the Guild is unknown to non-members. Secret handshakes and codenames (usually related to money or wealth) help to keep the inner matters of the Guild concealed from outsiders despite its constant exposure to public commerce and exchange. All members are required to learn the Merchant's Tongue, a rapid-fire language that is frequently updated in order to retain its value as a private code. Members are briefed on the changes whenever they return home.

The Merchant Guild has developed quite a sense of superiority over the years; its members constantly remind everyone within earshot that it was the Guild that rebuilt the bonds of diplomacy between worlds, a tale the solar system is rapidly tiring of. The internal security officials of many nations often grumble that the Guild also served as a conduit for the Venusian Bank to extend its tentacular reach across the solar system.

▼ CURRENT CONCERNS

The Merchant Princes are distressed by reports of the Venusian Bank's deep involvement in the recent Odyssey Affair. The twelve "home" Princes have spent much of the past few months in close consultation with the Mercurian Administrator Golan Fairbanks, trying to find an equitable balance between reinforcing the national security, maintaining their posture of neutrality and finding out the exact Venusian intentions. The Guild has assisted Fairbanks in the transport and storage of a significant force of exo-armors reserved for Mercury's defense should war prove unavoidable. In return, the Guild is requesting that Corvus, the Mercurian Intelligence Agency, be put at its disposal in order to help keep an eye on the rest of the solar system. Administrator Fairbanks has given limited approval; he is concerned that the Guild may turn into a simulacrum of the Venusian Bank on Mercury. Nevertheless, many outgoing Guild ships are carrying Corvus agents.

On the international front, the Guild is strongly protesting (to the USN) the boarding and searching of several of their ships by both CEGA and Jovian personnel. However, the protests are mostly aimed at CEGA, since the Guild is sympathetic to the Jovians' current state of paranoia. The fact that, unlike those of CEGA, the Jovian security forces have been exceedingly polite and respectful to the Guild crews also contributes to the Guild's acceptance of that Confederation's activities.

▶ UNITED SPACE NATIONS

The United Space Nations (USN) is an earth-founded chartered organization whose purpose is to promote humanitarian relations between nations. However, its scope is greater than that of the old United Nations. It is more concerned with interplanetary rather than domestic politics. Thus, the various non-CEGA states on Earth are afforded little power in the USN Assembly. The existence of only eight voting positions in the USN has greatly simplified matters of organization. Sadly, this situation also makes it difficult for nations to stay neutral in disputes since every decision will have some effect on every member. Over the years, two "voting groups" have developed, although they are not formal associations. The Jovians, Martian Free Republic and Mercury tend to vote together, while CEGA, Venus and the Martian Federation form an opposing group. The Belt and the Independent States on Earth are wild cards; their decisions are motivated solely by their shared desire to be left alone. In recent months, however, these two members have been siding with the Jovian faction, increasing CEGA's frustration.

The chambers of the USN are located on Pyrea Orbital Station. An entire section of the colony cylinder is recognized as neutral territory for the use of the USN, complete with its own docking facilities and housing area.

▼ ORGANIZATION

The USN Assembly is made up of delegates sent from every participating nation. Earth and Mars are the only worlds that send more than one team of representatives to the Chambers at Pyrea; Mars sends two, and Earth supports a whopping twelve recognized governments in addition to CEGA. The CEGA group contains representatives from the homeworld, the Moon and the orbital colonies. For the purposes of international representation, the nomads have chosen to send one team to speak for all of them, although nomad tribes are not bound by their representatives' promises.

When decisions in the Assembly must be made, a vote among nations is taken. Each recognized nation is allowed one vote, with the exception of the twelve non-CEGA Terran powers, who must share one vote between them. This policy is maintained mostly to appease CEGA, which does not want its rivals on Earth to outweigh their voting power in the USN assemblies. CEGA, in turn, is allowed only one vote between Earth, the Moon and the Orbitals.

The USN is administrated by a Chairperson who presides over Assembly sessions and commands the Solar Police. Required to give up all citizenship or ties to any nation in order to symbolize neutral arbitration, the USN Chair is one of the most powerful person in the solar system, as he or she is the tie-breaker when the Assembly is deadlocked on an issue.

▼ CURRENT CONCERNS

Chairwoman Mogesha Johari has found the past few months quite harrowing. Every Assembly session has been wracked by arguments and accusations, which she has had to mediate. The increasing tension between nations has aroused concerns that talks may eventually break down, causing the USN to be disbanded. Chairwoman Johari has only words as her weapons; the USN can bring no force to bear on governments that refuse to attend, and SolaPol's work to expose hidden plots and backroom politics seems to only compound the anger crisscrossing the solar system.

Although her former African republic is part of CEGA, Johari bears the latter no special affection and is in fact openly dubious concerning CEGA's claims that those responsible for the Odyssey have all been apprehended and punished. Although she is trying to remain impartial, in keeping with her oath, she cannot help but identify with the inhabitants of Copernicus and Elysée, who have suffered unnecessarily at the hands of CEGA. She is also secretly suspicious of the Venusians' involvement in the matter, a concern shared by SolaPol Director-General Janus O'Grady.

◪ THE MAILED FIST OF PEACE

The founders of the USN realized that unlike its predecessor, this new international organization would need more than a World Court and a few peacekeeping troops to maintain order among the solar nations. Since the old UN had obviously failed in its task of encouraging civility among humans, the USN would have to take the next logical step and force the solar nations to behave. The Solar Police is the result of this doctrine, acting as the agents of the USN as it attempts to moderate the solar nations.

▶ SOLAPOL

SolaPol is widely recognized (and resented) as the finest intelligence agency in the solar system. Its agents are everywhere, working undercover as deterrents to any misbehavior. The Solar Police act as the eyes, ears and hands of the USN in its attempt to maintain the peace among solar nations.

The agency is tasked with performing the impossible. Its primary mission is to moderate the settlements of the solar system, to uncover both plots and misunderstandings and take steps to subdue them before they are impossible to stop. This gargantuan task is accomplished on a daily basis with little or no external help or support. SolaPol has naturally made many enemies along the way.

If a possible violation of interplanetary law under the jurisdiction of SolaPol has occurred, the agency will conduct an investigation. The information and evidence gathered in the course of that investigation are then presented to the appropriate official or agency, who will determine whether or not prosecution or further action is warranted. Depending on the outcome of the investigation, evidence is either returned or retained for court; some of it may be confiscated by SolaPol. Its agents are the main investigators of criminal acts that reach across frontiers, be they the work of individuals or organizations. Local law enforcement agencies have little choice but to turn to the Solar Police when their quarries escape their jurisdiction and flee to another settlement.

The main weapon of the agency is information, more so than firepower or politicking. They discover and reveal the agendas of hostile parties, leaving the definition of the term 'hostile' to their discretion. This has made everyone who has a secret to hide, which amounts to just everyone, suspicious of SolaPol. SolaPol law enforcement officials train at St. Cloud Academy, a small asteroid that orbits Pyrea station.

▼ PUBLIC FUNCTION

The public function of the Solar Police is threefold: the agents investigate crimes committed by non-residents, pursue criminals across interplanetary jurisdictions and make sure the Edicts are respected (see p. 108). In the course of these goals, they run across the full gamut of criminal acts, ranging from interplanetary smuggling to assassination.

This represents only part of their work. Both the USN and SolaPol are known to favor a stable solar system, and are ready to take action to maintain the peace. As such, SolaPol investigates rumors of arms build-ups and war crimes, and generally acts in the interests of peace everywhere.

▼ LAW ENFORCEMENT PROCEDURES

SolaPol agents may make arrests for any offense committed within the member states and their territories (all the settled planets, plus the Moon and the Orbitals) in their presence, or when they have reasonable grounds to believe that the person to be arrested has committed, or is intending to commit, a violation of interplanetary laws. Arrests in non-member settlements, such as most of the Belt installations, are also possible, though agents generally do not have sufficient authority to proceed. Exceptions are cases where, with the consent of the host, the USN has granted SolaPol extraterritorial jurisdiction.

If an individual is being sought by local police for committing a crime, a call will be placed to the SolaPol response system and the suspect will be placed on an alert list. The fugitive's name and correlated data will automatically be entered into a computerized database, which contain record collections of fingerprint, retinal, and DNA identifications. This data is always accessible to SolaPol agents everywhere. Any agency which inquires about this individual will be informed of his or her fugitive status. Local police will be notified immediately of the receipt of any additional information concerning the fugitive. As a standard procedure, SolaPol will immediately generate an arrest warrant against the individual if there is reason to believe he or she has left the settlement. Though SolaPol generally has the authority to make arrests on its own, it is primarily an investigative body and its agents often leave the task to local officers.

There are limits to what a SolaPol team can and cannot get away with, at what times and where. Its members must obey the local law codes at all times, and respect the established investigative procedures. They must also make sure they have the proper authority in an affair, keeping in mind that concurrent jurisdictions may exist, whereby a crime may concurrently be a local, state and solar violation. Agents may certainly not use ille-

gal means to gather information on a suspect, nor violate private property or rights while in pursuit of a fugitive.

While many agents chafe under these restrictions, most understand their purpose. Without them, the Solar Police would be little more than the USN's hired thugs. Some agents blatantly violate those codes, but they have either learned to cover their tracks or have quickly been removed. On the other hand, agents are prompt to be unofficially informed that efficiency matters and that bending the law in the face of good results will not lead to any problem with superiors; outside of the unavoidable rhetoric pertaining to protocol.

Being the main enforcer of the Edicts, SolaPol has broad discretional powers while investigating its possible violations. The use of physical force may be ordered if it is believed the suspects will oppose significant resistance, or if an urgent intervention is required. The Edicts Enforcement Bureau and the Crisis Intervention Team are the two SolaPol divisions that work together to spearhead assaults against those who have breached the Edicts. Exo-suited forces are available if need be. Unless rogue machinery and independent combat robots are believed to be present on the premises, their use is generally avoided.

▼POLITICAL FUNCTION

The political function of the organization is not widely advertised, but it is equally vital. The Solar Police is the main source of intelligence and information for the USN council. They keep the politicians up to date on the plans and agendas of the various governments and groups throughout the solar system.

Though many governments see SolaPol as little more than a hostile intelligence agency, one of its pivotal roles is to maintain equilibrium between the settlements by ensuring that no one group gains the upper hand over its neighbors. The Solar Police and the USN themselves are kept in check by their limited means and resources. The result tends toward a balanced system that remains constant.

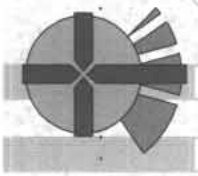
The least well-known function of the Solar Police, which remains buried in one of the final paragraphs of their charter, is to help keep mankind united in the face of possible dangers from without. Though no one believes in extra-solar invaders, the founding members took no chances.

▼SOLAPOL CHARTERS

The powers conferred to the Solar Police are derived from USN statutes that have been ratified by all major solar system settlements. SolaPol's charter, which is the broadest of all investigative agencies, authorizes it to investigate all criminal violations that have not been specifically assigned by the Council or General Assembly to another agency. SolaPol's investigative functions fall under the categories of applicant matters, civil rights, counterterrorism, foreign counterintelligence, organized crime, violent crimes and major offenders and major financial swindles. The Solar Police's authority to investigate specific criminal violations is reiterated by numerous other statutes, many of them voted in by member settlements. Although SolaPol is responsible for investigating possible violations of interplanetary law, it does not give an official opinion or decide if an individual will be prosecuted. The prosecutors employed by the Solar Court (see sidebar) or the local authorities are responsible for making this decision and for conducting the prosecution of the case.

SOLAR COURT OF JUSTICE

Not all settlements have viewed the formation of the Solar Police as a beneficial thing. Early on, many worked to put together an instrument that would give them some measure of control over the new police force. The result was the Solar Court of Justice, a multinational body that oversees the most high profile investigations. The Solar Court of Justice is used only to try high-profile cases and make final judgments on long-running appeals. The Court also looks into alleged abuses of power by SolaPol's agents and representatives. Judges called Justices go through a mental and psychological screening process as stringent as those of most security agencies and intelligence services. They set down the final word in trials, deciding alone what evidence or witnesses are to be permitted. While an appointed jury makes the final decisions, the judges are permitted to truncate presentations and speeches in order to expedite the process. The Court is allowed to throw out cases without trying them if they believe the evidence to be non-conclusive (a power that is sometimes used against the Solar Police if it is convenient).



▶ SOLAR CROSS

All colony cylinders have well-equipped medical centers, but these are only administered to care for the colony and its local space. The Solar Cross is a neutral corps dedicated to providing professional medical care to people traveling or inhabiting the vast reaches of international space. The hospital ships of the Solar Cross are considered non-aggression zones. No combat activity whatsoever is permitted in and around these vessels. This edict is enforced by all nations and space faring groups for their mutual benefit; no one wants to waste resources providing escort for hospital ships. Problems do arise when pirates and criminals elude authorities' pursuit by entering a hospital's safe zone.

In times of war, the Solar Cross is allowed to inspect POW camps and prisons to ensure humane treatment. The organization is also granted immunity in battle zones, provided that its ships are readily identifiable. Since the Solar Cross has never operated during wartime, no one knows how well these rights will be respected.

▼ ORGANIZATION

The Solar Cross' main offices are located in the USN complex on Pyrea. Its current Director is Dr. Paolo DesSources. The majority of Solar Cross personnel are scattered across space, crewing the organization's massive hospital ships. Most spaceports have small SC offices which serve as a recruiting centers as well as accounting stations. The Solar Cross is funded and equipped by the entire human community. Each nation voluntarily contributes large amounts of money, materiel and personnel. The Jovians provide mostly shuttles and exo-suits, CEGA offers ship hulls, the Martians donate pharmaceuticals, etc. The Solar Cross does not lack in equipment, but could always use a greater number of qualified personnel aboard the hospital ships.

People who volunteer for Solar Cross service are a special lot, willing to ignore political differences and cramped conditions to perform their duties. While the monetary benefits are minimal, the prestige and respect is enormous. Lasting out an extended tour aboard a hospital ship demonstrates excellent teamwork, compassion and efficiency under stress. Unfortunately, few people are willing or able to give their time and energy in this fashion, leaving the Solar Cross eternally understaffed.

▼ CURRENT CONCERNS

The distress beacon from Copernicus on Earth's moon drew the immediate attention of the SC *Teasdale* patrolling nearby. The ship responded immediately, burning to the Moon on the quickest available vector. When it arrived, however, the beacon had been shut off, and the *Teasdale* was warned off by a CEGA frigate. Refusing to be intimidated, Captain-Surgeon Ivan Oldziey faced down the CEGA captain. The bluff worked and the *Teasdale* was allowed to send Mobile Surgery Shuttles to the Moon's surface. The CEGA crew, already unhappy about their orders to "suppress" the Copernicus rebellion, "overlooked" the Solar Cross' presence on the Moon. By the time CEGA sent more ships, the Solar Cross had already advertised its findings across space, making a cover-up impossible. As a result, news of CEGA's ruthless massacre of Copernicus' population reached the entire solar system. Karen Hyrath, the CEGA captain who permitted the *Teasdale* entry into Lunar space, was subsequently court-martialed and dishonorably discharged.

This incident has noticeably soured CEGA's attitude toward the Solar Cross but endeared the organization to the rest of the solar nations. Although accusations of favoritism have arisen, the Solar Cross maintains that its purpose is to provide medical aid to those in need, regardless of cause.

BOHEMIAN HOSPITALS

Solar Cross ships are advertised by their white hue broken only by the organization's blazon. Solar Cross ships are one-of-a-kind refits replete with ad-hoc fixtures. They tend to be very large and interior space is given over almost entirely to medical facilities. They also support a large complement of daughter-craft and the odd refurbished exo-armor. Small gravity wheels are common, which operate when the ship is not under acceleration and permit doctors to perform operations that are not feasible under microgravity conditions. Finally, the ships are all unarmed; the 100-kilometer neutral zone surrounding each Solar Cross vessel is enforced only by the cooperation of the zone's beneficiaries.

▶ IGS

The Inter-settlement Geographic Society (IGS) is a much larger organization than it was when it was known as the National Geographic Society. Then, it had its hands full trying to catalogue all the wonder and majesty of Earth; now, it has the entire solar system with which to occupy itself. Although much of humanity is now quite homogeneous in terms of culture, dress and behavior, there are still pockets of uniqueness left in the solar system. Many IGS photographers wander the Asteroid Belt and the Independent States of Earth, recording the traits of the various cultures therein. Exploration of the vast expanse of the outer solar system is also a strong focus of the IGS. Most nations are too busy paying attention to themselves and each other to bother with exploration, leaving the IGS and occasional university collaborators to plumb the secrets beyond the settlements of humankind.

The Society has retained its centuries-old credo: "Only what is of a kindly nature is printed about any country or people." In the increasingly bitter social and political climate of the solar system, the IGS' strict adherence to this policy has made it welcome in every nation; its publications often serve as excellent public relations material.

▼ ORGANIZATION

The home offices of the IGS are located on Phoenix Station at Earth's L4 point. The organization left Earth along with the United Nations a short time before the Fall. During the period of isolation that followed, the IGS was one of the few sources of communication between worlds, informal as that interplay was. By the time the Mercurians had rebuilt the trading ties between nations, the IGS had already opened branch offices all over the solar system.

The IGS maintains a small fleet of exploration ships that chart and investigate the solar system outside of Jupiter's orbit. Although the ill-fated *Beagle II* was the best known of them all, over a dozen other vessels continuously ply the lonely space around the outer planets, their captains and crews isolated from civilization for years at a time.

The IGS has also set up dozens of observatories. Of particular note are the telescopes located at crater bottoms on both poles of Earth's Moon, where permanent darkness results in temperatures only about forty degrees above absolute zero. These devices have proven extremely adept at spotting very cold, distant objects, while being less difficult to maintain than space-based telescopes. The IGS telescope, however, must share ground with CEGA spy stations, which use the same equipment for very different purposes.

The IGS remains a nonprofit organization. It is funded solely through public donations (much of which, admittedly, come from corporate interests) and the sale of Interplanetary Geographic magazine, which is distributed system-wide in a variety of formats.

▼ CURRENT CONCERNS

Recent events have strained the IGS' responsibility to its credo. The incredible canyon created by the fall of the Martian Orbital Elevator has been the subject of several photographic documentaries, many of which cannot help but point out the fact that the disaster was, in addition to being manmade, a direct result of the angry political climate of the solar system. As a result, CEGA is becoming increasingly critical of IGS activities. Other governments are less concerned about the writings of the organization, with the notable exception of the Martian Federation, where the last four issues of Interplanetary Geographic have been placed on the Banned List.

Although the multinational crews of the IGS bases near Saturn are getting along fine, conflicts have sprung up among some of the exploration teams closer to home. Many of the teams assigned to telescopes and signal monitoring stations are wracked by paranoia; everyone suspects everyone else of being a spy. In the telescope arrays at the poles of Earth's moon, Jovian crewmembers have been locked out of the observatory. The same has been done to CEGA and Venusian personnel on Europa and Callisto.

SIDEBAR: IGS WORLDMAPS

A common rumor among rookie scientists says that the walls of the chiefs' office at Phoenix Station map the planetary movements in real time. Wheter or noty that is true, there are few cartographers in the solar system that compares to those of IGS. Even Nomads have been informed of geographical details pertaining to their own Belt while poring over IGS maps. These are a wonder of precision and any such map costs well above 1000 credits.

▶ ZONET

One of the most widely watched and influential news and information video networks, Zenith Orbital Network (ZONet) is based in Kolis Station, an O'Neill cylinder station at the L4 point in the Earth-Moon system. ZONet was founded in 2174 as a local broadcast network servicing the orbital settlements at L4 and L5, as well as sending broadcasts to the Earth and Moon. In 2189, ZONet was acquired by Hannah Gutierez, a wealthy Orbital businesswoman who saw the potential for a commercial, system wide network. After extensive renovations to its facilities on Kolis and substantial internal restructuring, the refurbished and upgraded ZONet went on the air on March 7, 2190, addressing its first newscast to the citizens of the entire solar system.

Over the last twenty years, ZONet has become an important part of interplanetary society. From the underground colonies of Mercury to the distant stations on Titan, the round-the-clock broadcasts from Kolis are watched by billions of people. ZONet's ability to reach such a broad audience is accredited to serious capital investment in a network of relay satellite stations designed to boost broadcast signals (and help deal with interference from solar flares). Time lag between planets means that no ZONet broadcast is truly "live" when seen from outside the system of origin, but the two-hour Lead News broadcast (from 12:00 to 14:00 GMT) is still the best place to get international news. Other current affairs, entertainment, scientific and popular culture programs fill the schedule.

▼ ORGANIZATION

Zenith Orbital Network is a corporation with shares traded on the CEGA stock exchange in Brussels. Hannah Gutierez remains the main shareholder, but her interests are now represented by a proxy; Gutierez is 77 and finally seems to be retiring. The current president and CEO is Wolfgang Pfell, former head of ZONet's news and current affairs division. Pfell is assisted by a series of executive vice-presidents and division heads, each in charge of one of the major domains of ZONet interest (e.g. news, entertainment, and scientific affairs). By far the largest division is news and current affairs, which not only accounts for fully fifty percent of resources at ZONet broadcast center on Kolis, but is in charge of the various field offices.

ZONet maintains offices (usually staffed by about a dozen reporters, producers and technicians) at each of the national capitals, as well as on the Moon and major regions on Earth.

The news department also directs the activities of special correspondents, one or two-man teams of reporters sent to remote areas to seek a story. Some of these teams have their own vessels, but most find passage on commercial liners. The life of a special correspondent is an exciting one, allowing the reporter to go where the action is. ZONet correspondents are seen as brave and honest, going into the heart of danger (such as border disputes on Mars or pirate colonies in the Belt) for the sake of the story.

▼ CURRENT CONCERNS

ZONet is mainly occupied with the business of providing system-wide news coverage and remaining the top outlet for such news. As a part of the Gutierez Media family, ZONet works in collaboration with other major media corporations such a Phoebus Pictures, IXT Telecommunications and Morris Electronic Publishing. Zenith nevertheless faces competition from a growing number of rival broadcasters, including the inter-settlement service of the Jovian Public Access Network and lunar-based OmniNews.

The degree of competition has forced ZONet to make tough decisions and some feel they have sacrificed accurate coverage for ratings. Part of ZONet's competitive edge is its apparent ability to get reporters anywhere and at anytime to bring breaking stories to the world at large. This access becomes difficult when local powers decide they are better served by silence. One way to break the silence is to accommodate the wishes of local authorities and "spin" the truth somewhat. Several members of the Martian Federation, under the cover of anonymity, have claimed that ZONet reported false evidence of STRIKE involvement in the devastating destruction of their Martian orbital elevator to cover up the role of the Martian Free Republic.

LIVE FROM ELYSÉE

For the past two years, ZONet has enjoyed unprecedented access to the government of the Jovian Confederation and its representatives. Elysée bureau chief Marion Fynn has conducted regular interviews with top Jovian officials, including several with President Itangre herself. Fynn and Itangre seem to have a friendly and open relationship on camera and the weekly "Live from Elysée" broadcast has become very popular with politically aware viewers. It has also been the place Itangre or her ministers have often chosen to announce their new foreign policy initiatives.

Up until recently, the two women enjoyed a cordial professional relationship off camera as well. In the last few months, however, Fynn has been looking into the details of the Odyssey Affair. She believes that her superiors at ZONet may have suppressed evidence of Jovian involvement in the destruction of the Martian orbital elevator. She has also been digging into the President's past with accused traitor Avram Thorsen. Itangre is less than pleased by these inquiries and has substantially reduced her contact with Fynn.

▶ STRIKE

Despite years of investigation by virtually every intelligence agency in the solar system, very little hard data exists regarding the organization known as STRIKE. Often branded as an unusually well-equipped terrorist operation, STRIKE's alleged activities are, if truly the work of a single entity, implicative of an organization with high-level production, political and intelligence resources.

▼ STRUCTURE

The organization is actually made up of dozens of unlinked cells that share little more than the STRIKE name. While some kind of central command is expected to exist, its nature is completely unknown to the individual cells; captured STRIKE members are often even unaware of their teammates' real names.

STRIKE's stated motive is the elimination of Venusian control of CEGA; this goal is logically extended to include the destruction of CEGA as well. Individual cells carry out operations toward this end, but observation indicates that there is little overlap between them. This suggests that STRIKE's unseen central command coordinates cell activities by guesswork and predictions of how any two or more cell's combined psychological profile will react to its environment and the events around it.

▼ MODUS OPERANDI

Given that hostility toward CEGA is common, STRIKE draws recruits and support from every Solar nation; even certain Venusian factions have cause to support the reduction of the Venusian Bank influence in the CEGA Council. Somewhat ironically, this agglomeration amounts to the solar system's only true multinational military force. This partially explains the apparent schizophrenic nature of STRIKE's activities, which range from child kidnappings to deliveries of medical supplies.

Muddying the question is that fact that far more actions are attributed to STRIKE than that organization can possibly be capable of in a physical, much less moral, capacity. One must take into account the dozens, if not hundreds, of criminal and terrorist groups who perform actions in the name of STRIKE without actual affiliation. A true STRIKE cell is distinguishable from fakes, but often only after extended observation; STRIKE cells are characterized by a long-range political agenda, high levels of expertise and security, top-of-the-line equipment, reliable intelligence and odd instances of political or military sympathy (for example, several cases of captured members "escaping" from the custody of otherwise competent prison administrators).

In the wake of the Odyssey Affair, many STRIKE cells that previously did not communicate with each other now show signs of coordinated actions. Further observation has proven difficult, however, since there has also been an increase in STRIKE's ability to root out infiltrators and surveillance devices. Either various intelligence informers within outside organizations have turned to STRIKE as a more expedient route to national defense, or a single powerful organization has begun to work in concert with it. The skill and persuasiveness of STRIKE's intelligence recruitment effort is evidenced by its invisibility. It is clear that agents who are approached by STRIKE and do not end up working as double-agents are all efficiently silenced.

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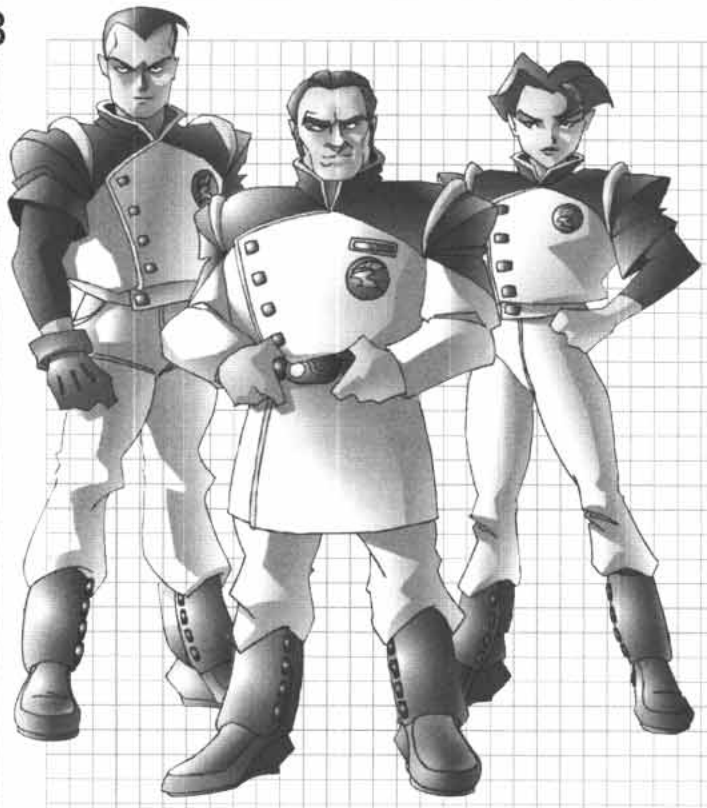
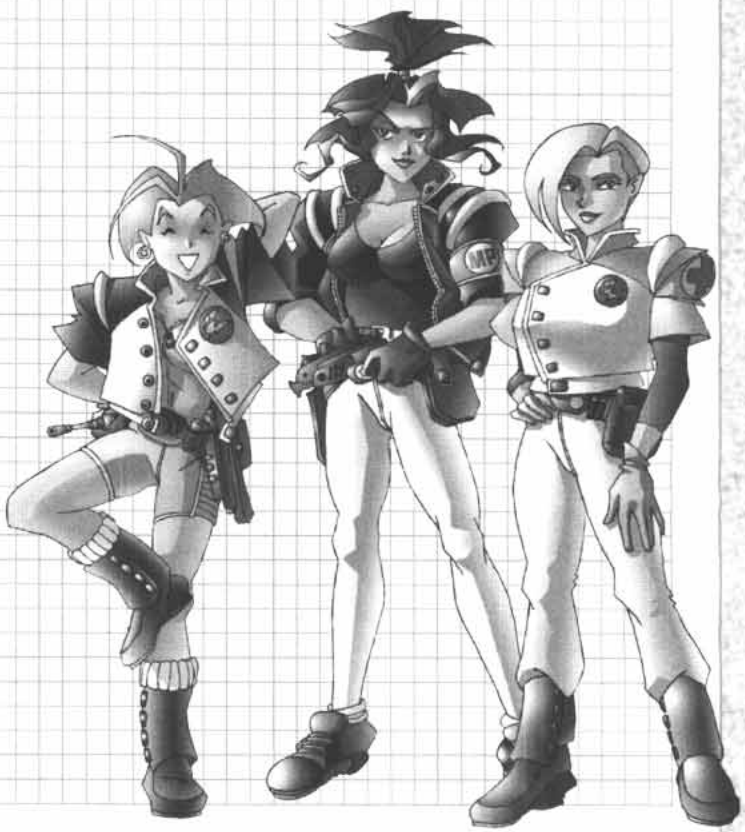


JAF SENIOR STAFF

The three soldiers at left are senior staff aboard a Jovian vessel. Except for the captain, who wears a modified version of the dress uniform, officers all wear the same uniform as the enlisted troops. Rank insignias (see p.56) are attached to the collar. From left to right, Executive Officer (XO), Captain, Squadron Commander.

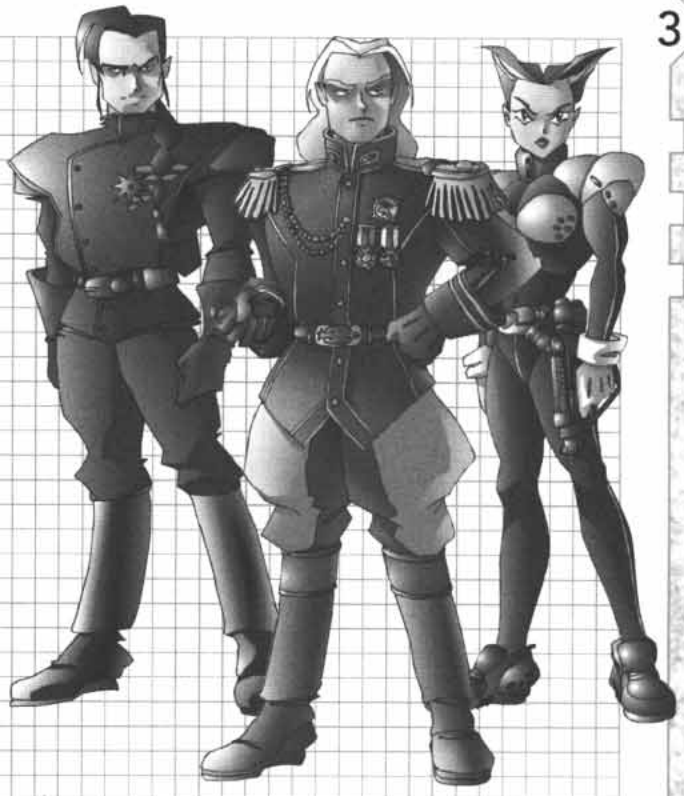
JAF SPECIALISTS

Specialists are generally talented and highly skilled individuals, and receive more leeway when faced with regulations. This is especially true for ships that are detached for long duties away from home. From left to right, Chief Technician, Security Officer, Medical Specialist (the latter's suit has turquoise shoulders rather than the usual black).



ANTAGONISTS

There are numerous factions within the solar system, and all have their own objectives — which, many times, are at odds with one another's. The three characters shown here, left to right, are a Venusian corporate soldier, a Martian Federation exo-armor pilot in full dress uniform, and a STRIKE terrorist in commando infiltration suit.



CEGA SHIP CREW

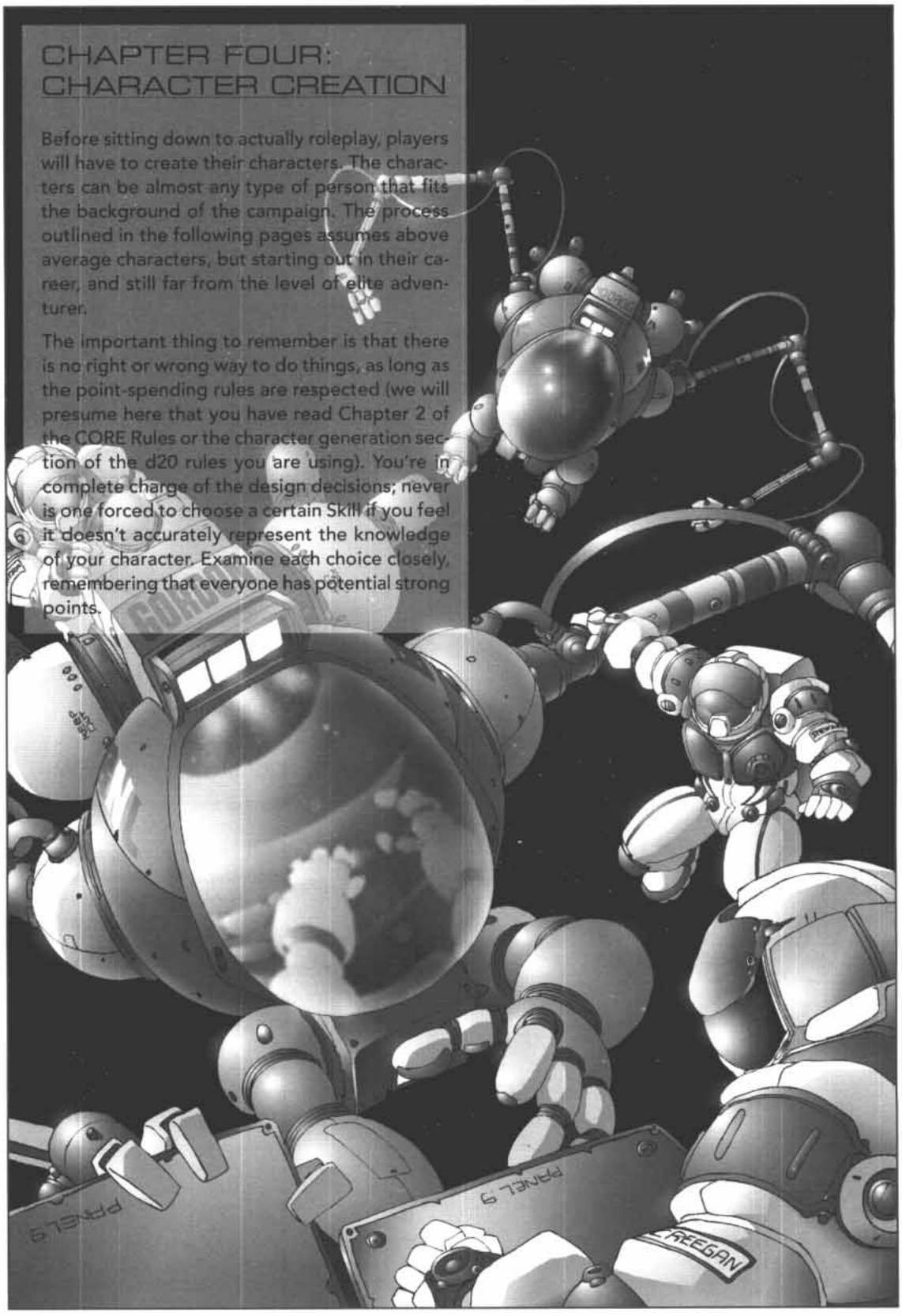
Most of the fleets of the Central Earth Government & Administration is composed of spaceships, CEGA still being a bit behind on understanding the usefulness of auxiliary craft such as fighters and exo-armors. The characters shown here are, from left to right, a CEGA exo-armor pilot in flight suit, the ship's captain, and a fighter pilot.

4

CHAPTER FOUR: CHARACTER CREATION

Before sitting down to actually roleplay, players will have to create their characters. The characters can be almost any type of person that fits the background of the campaign. The process outlined in the following pages assumes above average characters, but starting out in their career, and still far from the level of elite adventurer.

The important thing to remember is that there is no right or wrong way to do things, as long as the point-spending rules are respected (we will presume here that you have read Chapter 2 of the CORE Rules or the character generation section of the d20 rules you are using). You're in complete charge of the design decisions; never is one forced to choose a certain Skill if you feel it doesn't accurately represent the knowledge of your character. Examine each choice closely, remembering that everyone has potential strong points.



▶ STEP ONE: GENERAL CONCEPT

Your character must first be imagined. Is it a he or a she (you need not play a character of your own gender)? Is he tall and muscular or lean and intellectual? The *Defining a Character* sidebar offers a few questions that will help define the character. The more answers provided, the more detailed (and alive) the character will be.

There are surprisingly few types of characters in anime — or most genres, in fact. For heroes — the players — we need a character story (the stereotype — see Step Three) and an occupation (the archetype — see Step Four). By combining those and customizing the result, you get an original character that remains true to the genre.

DEFINING A CHARACTER

- What is the character's gender?
- What is the character's race?
- What is the character's physical appearance?
- Does the character have a distinctive physical trait?
- What are the psychological traits of the character?
- Does the character have any good habits?
- Does the character have any bad habits?
- How old is the character?
- Where is the character from?
- What was the character's family like?
- What relationship did the character have with his family?
- Does the character have any current personal relationships?
- What is the character's occupation?
- What is the character's lifestyle like?
- Why does the character do what he does?
- What are the character's personal goals?
- Does the character have any secrets?
- Who are the character's friends and rivals?
- What is the character's name and/or nickname?

▶ STEP TWO: PICK RACE

There is only one race in the **Jovian Chronicles** setting: human. Over the decades, however, the basic human body type has changed to meet new conditions, such as life on other planets or in small space stations. While the environment can be changed/controlled through terraforming or enclosed living structures, gravity cannot be modified and affects the inhabitants' physiology (see CORE Rules, 6.2 *Aliens and Modified Humans*).

Attribute ranges are unchanged if the character's place of origin has a gravity that falls between 80 and 120 percent of Earth's — the difference is not significant. This includes most of the colony cylinders, whose rotation is calibrated to produce the equivalent of one gee (one Earth gravity). If gravity is weaker than Earth's (less than 0.8 G), the character is considered to be a *Lightworlder*. Characters from a space station where gravity is less than 0.05 G are called *ZeeGees*.

Lightworlders: Light worlders spend most of their lives in weaker gravity fields, which reduces the stress put on their physical bodies. As a consequence, they tend to develop a slight atrophy of the muscular and skeletal systems, both controlled by medical technology to prevent physiological problems. Lightworlders are usually more agile than humans living in standard gravity and are also taller, with an average height of 1.90 meters for men and 1.80 meters for women. All Light Worlders automatically receive the Survival (Space) Skill at level 1/Cpx 1, since they must live in pressurized habitats and thus have some knowledge of space safety procedures.

HUMAN RACES

Type	AGI	APP	BLD	CRE	FIT	INF	KNO	PER	PSY	WIL
Grounder/Colonist	-	-	-	-	-	-	-	-	-	-
Lightworlders	-3/+5	-	-5/+3	-	-5/+3	-	-	-	-	-
ZeeGees	-3/+5	-	-5/+2	-	-5/+3	-	-	-3/+5	-	-

AGI to WIL indicate the minimum and maximum values of the Attribute in question. If no number is indicated, the normal human Attribute range (-3/+3) apply.

ZeeGees: Dwellers of zero- or micro-gravity space stations and small asteroids, the ZeeGees' physical bodies have been affected from growing up in an environment with very little or no gravity. ZeeGees routinely suffer from atrophy of the muscular and circulatory systems, but are renowned for their heightened sense of balance and quicker reflexes, as well as their all-around awareness. Average height is 1.95 meters for men and 1.90 meters for women. For obvious reasons, all ZeeGees automatically receive the Zero-G and Survival (Space) Skills, both at level 1/Cpx 1.

OGL: SPACER RACES

There is only one race available to Jovian Chronicles characters, Human. There are, however, two human "variants," the Low Gravity spacer and the Zero Gravity spacer. Other than their modified stats and cultural traits, however, they are human in every way and treated as such for rules purposes.

Low Gravity:	+2 Dex, -2 Con
Zero Gravity:	+2 Dex, +2 Wis, -4 Con

▶ STEP THREE: PICK STEREOTYPE

The giant robot anime stories that the **Jovian Chronicles** are inspired from include a number of character stereotypes. Most of the heroes fall into one of the following categories: Rookie, Veteran, Expert, Specialist and Curiosity. Each stereotype is a modifier that applies to the character archetypes (see Step Four), effectively multiplying the genre options available from 8 to 40.

The stereotype affects the number of points available to build the character, in exchange for some limitations or bonuses. Each stereotype also has an attached *anime power* that corresponds to the genre's expectations. This is an option that can be used at any time, once per game session.

One doesn't have to pick a stereotype — if preferred, a custom character can be built using the standard character generation rules (see CORE Rules, Chapter 2). Such a character starts with five additional Emergency Dice.

▼ THE ROOKIE

The Rookie is innocent and/or with little training, though he has lots of personal ties and high expectations about the profession.. He has more background than actual experience. Though he's often caught in a story against his will or by accident, the Rookie has potential: he frequently follows in the footsteps of the Veteran, usually with more success. He's the "Boy Wonder," learning much faster than anyone around.

Game Stats: The Rookie has only 2/3 of the standard starting Skill Points available (round up) to build the character. Any Experience gain is doubled (i.e., when receiving 1 XP, counts as 2 XPs).

Anime Power — Beginner's Luck: Once per game, the Rookie can spend an Emergency Die and turn a negative modifier into a positive one or vice versa, for up to +/-3.

▼ THE VETERAN

The Veteran is always experienced, often with nothing to learn in his trade. Some wish to retire, others to remain active, but they are all highly respected and quoted. The Veteran usually sees little or no progress in his field of expertise. Any experience gained goes into something else, usually character development: training a green, having a rocky romance, solving a drug problem, escaping the past, even dying heroically (to make room for the up-and-coming Rookie).

Game Stats: The Veteran gets 1/3 more Skill Points (round up) than the standard starting amount available to build the character. Any Experience gain is halved (i.e., when receiving 2 XPs, counts as 1 XP).

Anime Power — Voice of Experience: The Veteran can spend an Emergency Die and give someone else a tip that either automatically works (in roleplaying situations) or that helps a lot (bonus of +3 on one test). The result can be delayed, but must take place during the same game session or it has no effect.

▼ THE EXPERT

Also known as the Tough Guy, the Expert is fairly skilled already. He's a decent jack-of-all-trades and cares little about professional improvement. He's good on his own, but usually very opiniated and difficult to live with in groups. He may be nice inside, but won't let it pass his gruff exterior. The

reluctant hero, the mercenary becoming good, and the selfish character becoming loyal to others are all examples of the anime Expert. He often finds himself opposing the story's "typical" hero although he'll follow and aid him. A dramatic version of this is the Tough Guy admitting his love in one heroic act which causes his death.

Game Stats: The Expert has only 2/3 of the standard starting Character Points available (round up) to build the character. Whenever Complexity comes into play for a Skill test, the character's Cpx in that Skill gets a +1 bonus.

Anime Power — Survival Instinct: The Expert gains 1 Survival Point at the end of every game session (these can be stockpiled). Each point can be spent to reduce one opponent's Skill level by 1 (even down to 0, or unskilled, level) for the duration of the scene/combat.

▼ THE SPECIALIST

The Specialist category covers many character types. In many ways, they are the opposite of the Expert: they are very good at what they do, thanks to their inherent abilities, but their skills are focused in a few select fields. They also usually lack confidence or suffer from some character flaws that constantly interfere with their lives.

Game Stats: The Specialist gets 1/3 more Character Points (round up) than the standard starting amount available to build the character. He must take an equal point value of character Flaws (see CORE Rules, section 2.4).

Anime Power — To the Limit: The Specialist can spend Emergency Dice to push his equipment to the limit. Each die acts as a Power Booster rating point (see CORE Rules, *Vehicle Perks*).

▼ THE CURIOSITY

Strange, exotic, alien, the Curiosity thinks and acts differently. Traditionally female, they are good-looking and often candid. Some suffer from amnesia, some are incarnations of greater powers. The Curiosity isn't an impressive character, but she has access to connections or technology that makes her a force to reckon with. This is a Gamemaster's call according to the theme(s) of the campaign — it may be constant access to a computer network, a vast fortune, or unknown powers (perhaps the Curiosity has been secretly bio-engineered to survive in space).

Game Stats: The Curiosity has only 2/3 of the standard starting Character and Skill Points available (round up) to build the character. The Appearance Attribute must be +1 or higher.

Anime Power — Charm: The Curiosity can spend an Emergency Die and roll a charm test against a person (INF vs. Threshold 5). Success indicates fascination or even love, failure indicates prejudice. The result is permanent if MoS/MoF is greater than 1.

OGL STATS: ANIME POWERS

Beginner's Luck: Once per game, the Rookie can spend an Action Point and turn a negative modifier into a positive one or vice versa, for up to +/-10.

Voice of Experience: The Veteran can spend an Action Point and give someone else a tip that either automatically works (in roleplaying situations) or that helps a lot (bonus of +10 on one test). The result can be delayed, but must take place during the same game session or it has no effect.

Survival Instinct: The Expert gains 1 Survival Point at the end of every game session (these can be stockpiled). Each point can be spent to reduce all of one opponent's tests by 1d6 for the duration of the scene/combat.

To the Limit: The Specialist can spend Action Point to push his vehicle/equipment to the limit. Each point spent can do *one* of the following for one round: +2 square of speed, +2 Handling, +1d6 damage, reduce range increment by 2 (down to 0).

Charm: The Curiosity can spend an Action Point and make a *Charm* check against a person. Success indicates fascination or even love, failure indicates prejudice.

▶ STEP FOUR: PICK ARCHETYPE

The following represent some of the more typical occupations for the heroes of **Jovian Chronicles** roleplaying games. This should help you decide how to tie your character in with others as well as help Gamemasters get ideas for potential adventures and campaigns. They present basic Attribute and Skill selections (and costs) so that players need only worry about the few leftover points to customize their character. Gamemasters in need of a quick Non-Player Character can make use of any of these sets of stats as is.

The *Typical Attributes* and *Typical Skills* sections provide the standard stats for Player Characters of each career. Secondary Traits are provided for the convenience of those using Attributes (and relevant skills) without change, but will need to be recalculated if additional Attribute (or Hand-to-Hand and Melee) levels are purchased with remaining points.

The *Equipment and Costs* table provide guidelines on basic starting items. The *Typical Equipment* and *Salary* sections are the real-world advantages that come with the career. Gamemasters will need to decide what the precise salary and starting equipment is on a case-by-case basis. The *Basic Costs* section gives the price in Character Points and Skill Points of the listed Attributes and Skills. Thus, anyone wanting to quickly design a character can use these costs to establish an Attribute and Skill base, using the remaining points to improve whatever Attribute or Skill deemed important by the player.

The *Action Use* and *Intrigue Use* sections provide ideas on the ways in which characters of the career can become involved in different types of campaigns.

The *Possible Variations* section provides other character types closely related to the archetype in question. The stats provided can be used as is, or a few Skills can be added or removed to better conform to the new role.

The *Possible Subplot* section details a possible secondary story line of subplot that can be used with the archetype. These subplots can run for only a few adventures or the length of the campaign, giving a sense of continuity to a possibly unrelated series of adventures.

Like the stereotypes, each archetype has an attached *anime power* that correspond to the genre's expectations. This is an option that can be used at any time, once per game session. They are rule-generic, and apply no matter which system is used.

One doesn't have to pick an archetype — a custom character can be built using the standard, basic character generation rules. Such a character starts with five additional Emergency Dice.

▼ THE PILOT

As the daring, square-jawed officer that's featured in propaganda and recruiting videos, Pilots are well known. Though fleets of spaceships remain the core of space navies, the exo-armors and space fighters have become the expression of 23rd century military might.

Exo-pilots are renowned as glory hounds and military trainers often struggle to rein in their enthusiasm. The JAF are infamous in military circles for unofficially sanctioning the cockiness and lack of discipline of their pilots. Despite a propension to excessive collateral damage, exo-armor pilots remain the darlings of the public.

Though not as glamorous, those who pilot fighter air- and spacecraft are well-respected. In planetary combat, air fighters still reign supreme because of exo-armors' lack of lift. In space combat, however, exos are more versatile. Pilots of space fighters swear by their craft, however, and refuse to bow before the exos.

◇ EQUIPMENT AND COSTS

Typical Equipment: Flight uniform, sidearm, dress uniform, survival gear, access to military vehicles.

Salary: Varies with rank and individual armed forces. Usually 30,000 credits a year and above.

Basic SilCORE Costs: 19 Character Points and 29 Skill Points.

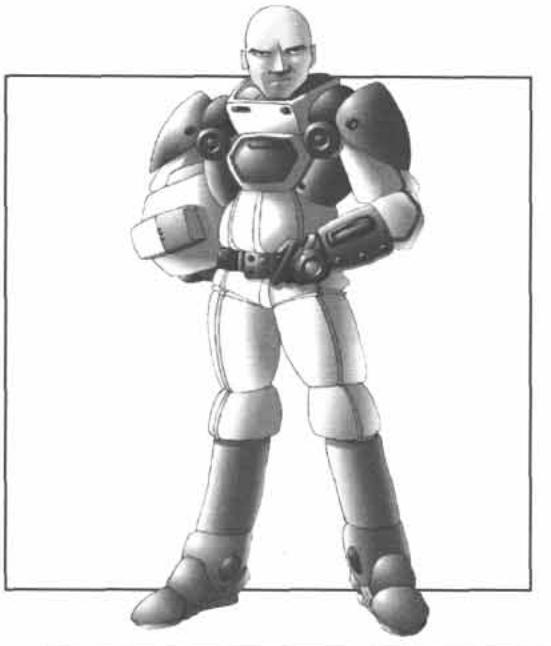
◇ GAME INFO

Action Uses: Piloting top of the line machines into battle, they are the elite warriors of the 23rd century. Even outside their vehicle, pilots are trained soldiers who can handle themselves in a fight.

Intrigue Uses: Participating in a secret military operation, witnessing the use of a new prototype, or raiding a corporate (or diplomatic) vessel can all lead straight into a series of intrigue-based adventures.

Variants: The most glamorous of pilots are test pilots. These intrepid souls risk their lives to push the envelope one step further. Rookie pilots fresh from training often seek out dangerous missions for the thrill of it all. Grizzled veterans form a counter-point to the youngsters: these old-timers bring an air of somber experience to a campaign.

Subplot: Rivalry with an enemy pilot is always a possibility, especially in a cold war situation (such as along the Martian border).



SILCORE STATS

Attributes: AGI +1, APP 0, BUI 0, CRE 0, FIT +1, INF 0, KNO 0, PER +1, PSY 0, WIL 0
Secondary Attributes: STR 0, HEA 0, STA 25, UD 4, AD 3
Typical Skills: Combat Sense (2/1), Etiquette (Military) (2/1), Gunnery (Space) (2/1), Hand-to-Hand (1/1), Information Warfare (1/1), Navigation (Space) (2/1), Pilot (Space) (2/1), Small Arms (1/1), Technical Sciences (Communications) (1/1), Technical Sciences (Computer) (1/1), Zero-G (2/1)
Other possible Skills include Leadership, Melee, Survival, Technical Sciences (Electronics), Zero-G (Combat) specialization.

OGL STATS

Military Pilot (Fast Hero 2), CR 2; Medium-sized human; HD 2d8+1; hp 14; Mas 12; Init +4; Spd 30 ft.; Defense 16, touch 16, flat-footed 14 (+2 Dex, +4 Class); BAB +1; Grap +3; Atk +3 melee (1d3+2, fists/as weapon type); Atk +3 ranged (as weapon type); SQ none; AL any; SV Fort +1, Ref +4, Will +1; AP 6; Rep +0; Wealth 2d4+2*; Str 14, Dex 15, Con 12, Int 11, Wis 12, Cha 11
Skills: Computer Use +2, Craft (electronic) +2, Craft (mechanical) +2, Knowledge (tactics) +3, Navigate +4, Pilot +5, Profession +3
Feats: Aircraft Operation (spacecraft), Exotic Firearms Proficiency (space vehicle weapons), Personal Firearms Proficiency, Simple Weapons Proficiency
Talents: Evasion
*Includes feat, occupation and talent bonuses

ANIME POWER — SIXTH SENSE

When piloting an exo-armor or space fighter, the character is extremely aware of his environment. Once per game session, the Pilot can either negate one surprise attack (he caught a reflexion off their wings seconds before the enemy craft opened fire), automatically reverse a tail (with a daring maneuver or simply by hitting the airbrakes) or shake off pursuit.

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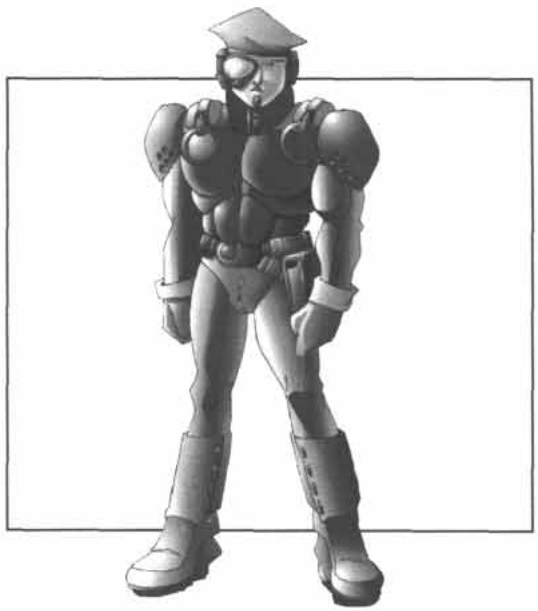

▼ THE SOLDIER

Skirmishes constantly crop up along the border of warring nations, corporate arcologies are closed against the poor and opportunistic, and fanatical terrorists seem ready to take innocent lives at every turn. In a world such as this, soldiers, police officers and private security guards are an all-too-common sight.

Soldiers can range from elite officers of the CEGA Naval Forces to the common grunts of the Martian Federal Army. Because of the massive distances involved in interplanetary (or even planet-wide) operations, in most armies, command decisions often leave room for soldiers' own initiative and independence.

Civilian security officers operate much as they have for hundreds of years, often based in squads assigned to specific regions or crimes. Smaller stations tend to have marshals or sheriffs who oversee all law enforcement.

◇ EQUIPMENT AND COSTS

Typical Equipment: Sidearm, uniform, patrol vehicle, personal comm gear, flashlight, restraints (security officer); Fatigues, rifle, hand grenades, personal medical kit. (soldier)

Salary: Varies from 17,000 to 40,000 credits a year.

Basic SilCORE Costs: 19 Character Points, 29 Skill Points.

◇ GAME INFO

Action Uses: Whether special forces or corporate security, they have the skills and resources to fight in whatever battles come. Soldiers or officers trained in secondary skills such as investigation or scouting can be even more interesting because they permit a mix of action and subtlety.

Intrigue Uses: Police officers can stumble into unusual situations. Special forces soldiers often participate in covert operations and may find themselves cut off in an operation gone wrong.

Variants: Corporate security officers are trained only to defend the interests of their employer. This dynamic is purest in the case of bodyguards, who dedicate themselves as human shields and security experts for their charges.

Subplot: Soldiers, police officers and security agents may find themselves feeling empathy toward the other side, usually reinforced by a personal connection to an enemy or criminal.

SILCORE STATS

Attributes: AGI 0, APP 0, BUI +1, CRE 0, FIT +1, INF 0, KNO 0, PER +1, PSY 0, WIL 0
Secondary Attributes: STR +1, HEA 0, STA 30, UD 7, AD 6
Typical Skills: Athletics (1/1), Combat Sense (2/1), Defense (2/1), Hand-to-Hand (2/1), Interrogation (1/1), Investigation (1/1), Melee (1/1), Notice (2/1), Small Arms (2/1), Streetwise (1/1), Technical Sciences (Electronics) (2/1)
Other possible skills include Disguise, Medicine, Navigation (Specific), Pilot (Exo), Social Sciences (Law), Survival (Specific), Zero-G.

OGL STATS

Soldier (Tough Hero 2), CR 2; Medium-sized human; HD 2d10+2; hp 19; Mas 14; Init +1; Spd 30 ft.; Defense 13, touch 13, flat-footed 12 (+1 Dex, +2 Class); BAB +1; Grap +3; Atk +3 melee (1d4*+2, fists/as weapon type); Atk +2 ranged (as weapon type); SQ none; AL any; SV Fort +4, Ref +1, Will +1; AP 6; Rep +0; Wealth 2d4+2; Str 14, Dex 13, Con 14, Int 11, Wis 12, Cha 11
Skills: Climb +3, Knowledge (streetwise) +3, Knowledge (tactics) +3, Intimidate +1, Gather Information +1, Navigate +2, Spot +3,
Feats: Combat Martial Arts, Light Armor Proficiency, Personal Firearms Proficiency, Simple Weapons Proficiency
Talents: Second Wind
*Includes feat bonus; damage may be lethal or non-lethal (character's choice)

ANIME POWER — BRUISER

The character has been through rough times before and can shrug off massive damage either through sheer resilience or by a combination of luck and experience. Once per game session, the Soldier can completely negate the effects of one single attack, no matter the source. (If a gun is pointed at his head, it jams; if fired at by a bazooka, he barely manages to jump ahead of the explosion.)

▼ THE TECHNICIAN

Sealed environments would not last long without the massive engineering and repair crews that keep them functional. Huge spacecraft and sleek exo-armors are worth nothing to the military if they are constantly awaiting repairs.

Technical and engineering careers are among the most popular in the orbital stations, the Nomad asteroids and the Jovian Confederation, where there is an acute appreciation of skilled technical knowledge. Technicians tend to be dynamic and friendly, always ready to try something new or lend a helping hand.

The combination of social prestige and friendly reputation makes the stereotypical technician, even military techs, into a fatherly figure. Respected by the community around him, he offers wisdom and "paternal" commentary as he goes through life.

◇ EQUIPMENT AND COSTS

Typical Equipment: Extensive tool kit, portable computer with design specs, work suit, pressure suit.

Salary: Varies from 20,000 to 100,000 credits a year.

Basic SilCORE Costs: 19 Character Points and 30 Skill Points

◇ GAME INFO

Action Uses: Nothing is quite so painful as a critical equipment failure when the only chances of repair are 10,000 kilometers away. Technicians can also modify equipment and tinker together more than one solution to most problems.

Intrigue Uses: Technology is one of the main weapons of espionage and intrigue. The technical resources of the major powers are immense, and those who wish to play in the shadow world had best be prepared to fight fire with fire.

Variants: Computer techs can access the world of computer hacking and information alteration, to become virtual spies. Weapons technicians live and breathe in the world of combat, guiding their pet arms to their targets. Engineers and technical designers create new configurations and items.

Subplot: The major constraint on a technician's success is his access to resources rather than his skill level. The struggle to obtain needed resources can make for an interesting recurring subplot.

SILCORE STATS

Attributes: AGI 0, APP 0, BUI 0, CRE +2, FIT 0, INF 0, KNO +1, PER +1, PSY 0, WIL 0
Secondary Attributes: STR 0, HEA 0, STA 25, UD 3, AD 3
Typical Skills: Natural Sciences (Physical) (1/1), Technical Sciences (Communications) (1/1), Technical Sciences (Computer) (2/2), Technical Sciences (Electronics) (2/2), Technical Sciences (Mechanics) (2/2), Tinker (2/1)
Other possible skills include Business, Negotiation, Information Warfare, Design specialization in Technical Sciences (Electronics or Mechanics).

OGL STATS

Technician (Smart Hero 2), CR 2; Medium-sized human; HD 2d6; hp 9; Mas 11; Init +1; Spd 30 ft.; Defense 12, touch 12, flat-footed 11 (+1 Dex, +1 Class); BAB +1; Grap +1; Atk +1 melee (1d3, fists/as weapon type); Atk +2 ranged (as weapon type); SQ none; AL any; SV Fort +0, Ref +1, Will +3; AP 6; Wealth 2d4+3; Rep +1; Str 11, Dex 12, Con 11, Int 14, Wis 13, Cha 11
Skills: Computer Use +7*, Craft (electronic) +7*, Craft (mechanical) +8*, Craft (structural) +5, Disable Device +3, Knowledge (physical sciences) +5, Knowledge (technology) +5, Listen +4*, Spot +4*, Repair +10*, Research +4*
Feats: Alertness, Builder (electronic, mechanical), Gearhead, Simple Weapons Proficiency
Talents: Savant (Repair)
*Includes feat, occupation and talent bonuses

ANIME POWER — MIRACLE WORKER

The character is adept at coming up with solutions under stress. Once per game session, the Technician can completely and immediately negate one damage effect on a vehicle or piece of equipment, regardless of the availability of tools or spare parts. This makeshift repair lasts only until the end of the scene/combat.

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▼ THE SCIENTIST/MEDIC

Without the special radiation shields, power plants and recycling systems scientists have developed, very few humans could survive away from Mother Earth. The distances involved in interplanetary travel ensure that a medical hospital is almost certainly very far away. As such, vessels carry at least some medical personnel aboard.

The militarization of science and medicine is a major preoccupation for most of the scientific community. A growing number of scientists and medics feel disgruntled by this appropriation of their work and talk of a peace movement is growing.

◇ EQUIPMENT AND COSTS

Typical Equipment: Pressure suit, tool kit suitable to knowledge field, laboratory, high-powered personal workstation.

Salary: Depends on the employer. Ranges from 35,000/year for an undergrad/paramedic, to over 250,000/year for fully trained specialists.

Basic SilCORE Costs: 19 Character Points and 28 Skill Points.

◇ GAME INFO

Action Uses: *Medics are often at the forefront of* military action, to patch up pilots and soldiers and send them back to the firezone. Other scientists tend to watch from a safe distance, but are quick on their feet and may well improvise solutions more effective than any firearm.

Intrigue Uses: Cutting edge research is among the most valuable resources in which power-brokers deal. As such, scientists become a prime target for intrigue and covert recruitment. The line between medical research and bio-weaponry development can be very thin, and doctors and medics can also find themselves crossing into a shadowy world without any warning whatsoever.

Variants: Astrophysics, robotics, artificial intelligence and genetics are all developing fields, attracting young hot shots to challenge the positions of veteran thinkers. Dedicated members of the Solar Cross who travel in emergency hospital ships travel from hot spot to hot spot, treating the wounded and becoming involved in many critical events in the solar system.

Subplot: Rivalries between scientists and medics are common despite empty talk of academic cooperation.

◫ SILCORE STATS

Attributes: AGI -1, APP 0, BUI -1, CRE +1, FIT 0, INF 0, KNO +2, PER 0, PSY 0, WIL 0
Secondary Attributes: STR 0, HEA 0, STA 20, UD 2, AD 2
Typical Skills: Defense (1/1), Medicine (2/1), Natural Sciences (Earth) (2/1), Natural Sciences (Life) (2/2), Natural Sciences (Physical) (2/2), Notice (1/1), Teaching (1/1), Technical Sciences (Computer) (1/1)
Other possible skills include Combat Sense, Drive, Language (Latin), *Pilot (Space)*, *Social Science (History)*, *Technical Sciences* (Electronics or Mechanics), Tinker, Zero-G.

◫ OGL STATS

Scientist/Medic (Smart Hero 1/Dedicated Hero 1), CR 2; Medium-sized human; HD 2d6; hp 9; Mas 10; Init +0; Spd 30 ft.; Defense 11, touch 11, flat-footed 11 (+0 Dex, +1 Class); BAB +0; Grap +0; Atk +0 melee (1d3, fists/as weapon type); Atk +0 ranged (as weapon type); SQ none; AL any; SV Fort +1, Ref +0, Will +3; AP 6; Wealth 2d4+4; Rep +2; Str 10, Dex 10, Con 10, Int 16, Wis 12, Cha 11
Skills: Computer Use +5, Decipher Script +5*, Investigate +4, Knowledge (earth and life sciences) +8*, Knowledge (physical sciences) +7*, Knowledge (technology) +6*, Profession +3, Research +7*, Search +7*, Spot +1, Treat Injury +6*
Feats: Educated (earth and life sciences, physical sciences), Medical Expert, Simple Weapons Proficiency, Studious
Talents: Savant (Search)
*Includes feat, occupation and talent bonuses

◫ ANIME POWER — STARTLING DISCOVERY

The character has a knack for coming up with new ideas. At the end of each session, the Scientist/Medic gets a Research Point (RP). He can spend them at any time to either make an important discovery (2 to 4 RPs) or a significant improvement on a vehicle or piece of equipment (3 RPs per 10% increase in point value), with the Gamemaster's approval.

▼ THE REPORTER

The people's right to know and the networks' right to profits regularly sends legions of reporters across the solar system in search of the next big story. The major news services maintain offices in most planetary systems, employing staffs that range from a few independent freelancers to full professional teams.

Field correspondents are typically resourceful and independent, capable researchers, investigators, video technicians and authors as well as presenters.

◇ EQUIPMENT AND COSTS

Typical Equipment: Rugged all purpose clothing, portable audio/video equipment, personal computer.

Salary: Beginning field correspondents are usually paid 22,000/year and increases come with experience and prestige.

Basic SilCORE Costs: 19 Character Points and 28 Skill Points.

◇ GAME INFO

Action Uses: Reporting from battle scenes is perhaps the quickest route to fame and fortune in the world of the news media. Experienced reporters learn to think on their feet and keep calm in the line of fire, so they can be a real asset in action adventures.

Intrigue Uses: If combat reporting is the quick road to fame, the most respected is investigative journalism. These journalists can be surprisingly resourceful, using a whole network of hidden contacts to circumvent national security agencies and "follow the money" to the highest levels of political and corporate intrigue.

Variants: Scandal sheets and tabloids proliferate on the vid stands of many planets and those who seek out the secrets of the rich and famous make a handsome living. Top reporting teams still use camera technicians, and these hidden faces in the news-gathering process can also be interesting to roleplay.

Subplot: Most reporters have a pet story they pursue over long years of research. Often this has more to do with their own personal feelings than the "need to know." Such a story — perhaps a probe into the background of a politician — can form a recurring subplot over an entire campaign.

SILCORE STATS

Attributes: AGI 0, APP 0, BUI 0, CRE +1, FIT 0, INF +1, KNO 0, PER +1, PSY 0, WIL 0
Secondary Attributes: STR 0, HEA 0, STA 25, UD 3, AD 3
Typical Skills: Combat Sense (1/1), Etiquette (Bureaucracy) (1/1), Interrogation (2/1), Investigation (2/1), Notice (2/1), Streetwise (2/2), Technical Sciences (Communications) (1/1), Technical Sciences (Computer) (1/1), Trivia/Lore (Current Events) (2/1).
Other possible skills include Language, Social Sciences (History), Technical Sciences (Electronics).

OGL STATS

Reporter (Charismatic Hero 2), CR 2; Medium-sized human; HD 2d6; hp 9; Mas 11; Init +1; Spd 30 ft.; Defense 12, touch 12, flat-footed 11 (+1 Dex, +1 Class); BAB +1; Grap +1; Atk +1 melee (1d3, fists/as weapon type); Atk +2 ranged (as weapon type); SQ none; AL any; SV Fort +2, Ref +3, Will +3*; AP 6; Wealth 2d4+2; Rep +2; Str 11, Dex 12, Con 11, Int 13, Wis 13, Cha 13
Skills: Bluff +5*, Computer Use +3, Diplomacy +7*, Gather Information +7*, Intimidate, Knowledge (current events) +5, Knowledge (streetwise) +5, Research +3, Search +2, Spot +2
Feats: Educated (streetwise, current events), Iron Will, Simple Weapons Proficiency, Trustworthy
Talents: Fast Talk
*Includes feat, occupation and talent bonuses

ANIME POWER — JUST ASKIN' QUESTIONS

The character is able to look unobtrusive, no matter where he is or who he's talking to. Once per game session, the Reporter can blend into any crowd and fade quickly from peoples' memories, no matter what (such as if the character is openly bleeding, naked, running or shouting, etc.). The character can even talk briefly with people (ask directions, get basic information) without drawing suspicion. This ability comes in handy when entering restricted areas or talking to people anonymously.

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▼ THE OFFICIAL

Diplomats and business representatives are on the cutting edge of reorganizing the power structure of the solar system. Each decision contributes to the drive for a new order or the fall toward interplanetary chaos. Some executives seek only new business opportunities for their corporate bosses. Others realize how high the stakes have become and are dedicated to protect their interests in the face of the changes to come.

Though business executives and political officials often find themselves at odds and emphasize the differences between their positions, others see them as almost interchangeable. These elite power-brokers often look down on settlers and Nomads as barbarians and ne'er-do-wells.

◇ EQUIPMENT AND COSTS

Typical Equipment: Expensive clothes, personal computer, anti-espionage devices.

Salary: Typically 60,000/year and above (government officials), and 120,000/above (executives).

Basic SilCORE Costs: 19 Character Points and 29 Skill Points.

▼ GAME INFO

Action Uses: Government officials and business executives are often targets for piracy, covert operations or shows of force. As a result, they often learn to fight or surround themselves with bodyguards or skilled pilots. The objectives of their corporation or government place them in dangerous situations with frightening regularity.

Intrigue Uses: Executives and officials deal in secrets and understandings as their stock and trade. All the major powers of the solar system have their fair share of dirty secrets, and uncovering these can easily form the core of a campaign.

Variants: Officials exiled from the halls of power may escape with very valuable information and insight about the agendas and practices of their former employers. Another option is to play a mole or spy, an official who actually reports to a foreign or competing power. The shadow world of espionage is an excellent campaign backdrop.

Subplot: The struggle to strike a difficult deal or arrange for an unlikely treaty can form a recurring subplot. This can lead to efforts to make unlikely contact with those who may sway the other negotiating party.

SILCORE STATS

Attributes: AGI 0, APP 0, BUI 0, CRE 0, FIT 0, INF +1, KNO +1, PER +1, PSY 0, WIL 0
Secondary Attributes: STR 0, HEA 0, STA 25, UD 3, AD 3
Typical Skills: Business (2/2), Etiquette (Bureaucracy) (2/1), Leadership (1/1), Negotiation (2/1), Notice (2/1), Social Sciences (Law) (2/2)
Other possible skills include Language, Interrogation, Investigation, Social Sciences (History).

OGL STATS

Official (Charismatic Hero 2), CR 2; Medium-sized human; HD 2d6; hp 9; Mas 11; Init +1; Spd 30 ft.; Defense 12, touch 12, flat-footed 11 (+1 Dex, +1 Class); BAB +1; Grap +1; Atk +1 melee (1d3, fists/as weapon type); Atk +2 ranged (as weapon type); SQ none; AL any; SV Fort +2, Ref +3, Will +3*; AP 6; Rep +2; Wealth 2d4+4; Str 11, Dex 12, Con 11, Int 13, Wis 12, Cha 13
Skills: Computer Use +3, Diplomacy +5, Intimidate +7*, Knowledge (business) +7*, Knowledge (civics) +8*, Profession +2, Sense Motive +3, Spot +2
Feats: Confident, Educated (business, civics), Iron Will, Simple Weapon Proficiency
Talents: Coordinate
*Includes feat and occupation bonuses

ANIME POWER — DISTRACT

The character is adapt at drawing attention to or away from himself, by using ordinary objects (for example, discretely tossing an hors d'oeuvre into a wine glass to make a quick visual distraction) or sheer force of personality. Once per game session, the Official can automatically distract people away from his action, or call complete attention to himself.

▼ THE SPACER

The most rugged people in the solar system, Nomads live in converted asteroids that provide a difficult but good life. Each Nomad works day and night to keep the tribe functioning.

Citizens of more sophisticated locales are usually less then tolerant with Nomad informality and raucous behavior, projecting superiority and even contempt in all their encounters. Nomads repay these attitudes by making a game of insulting and making fools of their "sophisticated" employers.

Corporations, governments, and militaries all sponsor expeditions which often last years on end. These explorers tend to be a hardy and independent lot. They see settlers as somehow sedentary and even cowardly, unable to take the leap and continue pushing human habitation outward.

◇ EQUIPMENT AND COSTS

Typical Equipment: Repair tools, pressure suit, firearm, tools, astronomical navigation computer, survival gear.

Salary: Varies with occupation. Most Nomad clans use a barter economy. Technical contracts pay 20,000 -45,000 credits/year.

Basic Costs: 19 Character Points and 30 Skill Points

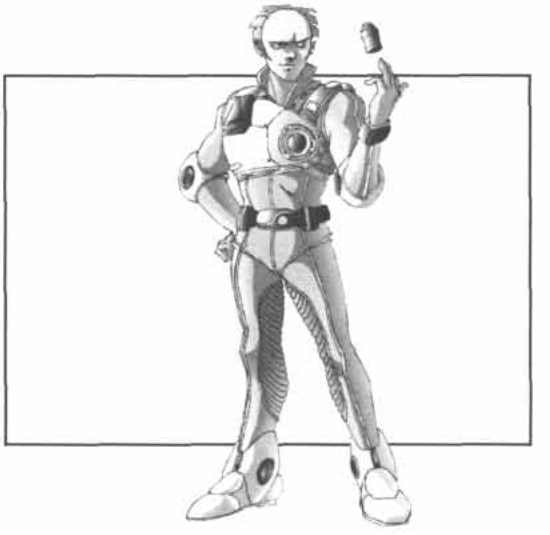
◇ GAME INFO

Action Uses: Nomads are tough as nails and willing to let their fists do the talking if necessary. They take the safety of their community very seriously and will readily lay down their lives for the clan. Exploration teams are often backed by military might, and can even serve as scouts for military forces, piloting into contended territory.

Intrigue Uses: The discovery of a new cache of valuable resources or a concealed military installation are sure to result in a web of intrigue. The major corporations and governments which hire Nomads and explorers to do dirty work have more then enough lies and cover-ups to go around.

Variants: Clan chiefs have the lives of their community in their hands, guiding their small world toward either prosperity or doom. Military scouts are the most common variant on the explorer career.

Subplot: Nomads and explorers may be trying to deal with the consequences of contracts undertaken for unscrupulous employers.



SILCORE STATS

Attributes: AGI 0, APP 0, BUI 0, CRE +1, FIT +1, INF 0, KNO 0, PER 0, PSY 0, WIL +1
Secondary Attributes: STR 0, HEA +1, STA 30, UD 5, AD 3
Typical Skills: Combat Sense (1/1), Defense (1/1), Hand-to-Hand (2/1), Natural Sciences (Earth) (1/1), Navigation (Space) (2/1), Negotiation (1/1), Notice (1/1), Pilot (Exo) (1/1), Pilot (Space) (2/1), Small Arms (1/1), Survival (Space) (1/1), Technical Sciences (Communications) (1/1), Technical Sciences (Electronics) (2/1), Technical Sciences (Mechanics) (2/1), Zero-G (2/1)
Other possible skills include Business, Demolitions and Traps, Gunnery (any), Medicine, Natural Sciences (Life), Streetwise, Technical Sciences (Computer).

OGL STATS

Spacer (Dedicated Hero 1/Tough Hero 1), CR 2; Medium-sized human; HD 1d6+1 plus 1d10+1; hp 13; Mas 13; Init +1; Spd 30 ft.; Defense 13, touch 13, flat-footed 12 (+1 Dex, +2 Class); BAB +0; Grap +1; Atk +2 melee (1d6+1, fists/as weapon type); Atk +1 ranged (as weapon type); SQ none; AL any; SV Fort +3, Ref +1, Will +3; AP 6; Rep +1; Wealth 2d4+1; Str 12, Dex 12, Con 13, Int 14, Wis 14, Cha 11
Skills: Craft (electronics) +3*, Craft (mechanics) +4*, Craft (structural) +2, Diplomacy +1, Knowledge (earth and life sciences) +2, Navigate +1, Pilot Exo+4*, Pilot Spacecraft +5*, Spot +3, Survival +3
Feats: Brawl, Builder (electronics, mechanics), Personal Firearms Proficiency, Simple Weapons Proficiency, Vehicle Expert
Talents: Empathy — bonus is not included in skill ranks
*Includes feat bonuses

ANIME POWER — SPATIAL AWARENESS

The character's inner ear isn't bound to gravity as gee-born people. Also, the he's a lot more adept at thinking three-dimensionally and operating in conditions of limited visibility. Once per game session, the Spacer can completely ignore low-light or darkness penalties for the duration of one scene/combat. In addition, he always know exactly where he is located within a building or structure.

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▼ THE SUPPLIER

The supply lines of settlements are navigated by the fleet of merchant vessels which ferry people and resources. Many of these vessels bear the seal of the Mercurian Merchant Guild.

The Guild imposes secret strictures on its members, but the merchants who fly its flag remain a varied lot. The merchant captain's creed requires independence and resourcefulness, seeking out the best routes and markets for their supplies. Those who flout the Guild's ways can expect to be blackballed by many legitimate space ports and often become smugglers of contraband.

Merchants usually begin their careers deep in debt, borrowing huge sums to acquire a used cargo vessel. The Guild helps fund these investments, and requires a percentage be paid back from revenues. Those who fail to repay their debts will usually have their membership revoked and their vessels confiscated.

◇ EQUIPMENT AND COSTS

Typical Equipment: Expensive clothing, jewelry, Guild membership, small sidearm, full or part-ownership in a civilian vessel.

Salary: Millions per year for the top traders. Successful ones make between 150,000 and 600,000 credits a year, while many just scrape by.

Basic SilCORE Costs: 19 Character Points and 29 Skill Points.

◇ GAME INFO

Action Campaign Uses: The search for profitable trade routes, the struggle against pirates and other rival traders make for some very tense moments and exhilarating combats.

Intrigue Uses: Most major powers have established supposed merchant vessels that double as intelligence gathering platforms. Of course, the Guild has intrigues of its own and major factions fight shadow wars, seeking commercial advantage at any price.

Variants: These range from the stoic second in command to the people who keep outdated fusion engines from giving up the ghost. Many pirates were once merchants, and playing these corsairs of the space ways can also make for an exciting campaign.

Subplot: Suppliers are almost always struggling to repay a debt or meet a quota.

SILCORE STATS

Attributes: AGI 0, APP +1, BUI 0, CRE +1, FIT 0, INF +1, KNO 0, PER 0, PSY 0, WIL 0
Secondary Attributes: STR 0, HEA 0, STA 25, UD 3, AD 3
Typical Skills: Business (2/1), Disguise (1/1), Etiquette (Bureaucracy) (2/1), Forgery (Official Documents) (1/1), Language (2/1), Negotiation (2/1), Notice (1/1), Social Sciences (Law) (1/1), Streetwise (2/2), Technical Sciences (Computer) (1/1)
Other possible skills include Information Warfare, Navigation (Space), Pilot (Space), Technical Sciences (Mechanics), Zero-G.

OGL STATS

Supplier (Charismatic Hero 2), CR 2; Medium-sized human; HD 2d6; hp 9; Mas 11; Init +0; Spd 30 ft.; Defense 11, touch 11, flat-footed 11 (+0 Dex, +1 Class); BAB +1; Grap +1; Atk +1 melee (1d3, fists/as weapon type); Atk +1 ranged (as weapon type); SQ none; AL any; SV Fort +2, Ref +2, Will +1; AP 6; Rep +3; Wealth 2d4+8*; Str 11, Dex 11, Con 11, Int 13, Wis 12, Cha 14
Skills: Bluff +2*Computer Use +1, Diplomacy +10*, Forgery +1, Gamble +2*, Gather Information +2*, Knowledge (business) +8*, Knowledge (civics) +3, Knowledge (streetwise) +7*, Profession +6*, Sense Motive +3, Speak Language, Spot +1
Feats: Educated (business, streetwise), Simple Weapons Proficiency, Trustworthy, Windfall
Talents: Fast-Talk
*Includes feat, occupation and talent bonuses

ANIME POWER — REQUISITION

The character is capable of locating and acquiring unusual items, no matter where they are, either through good business sense or by calling in favors. Once per game session, the Supplier can get any desired item of a non-military nature.

▶ STEP FIVE: ATTRIBUTES

Basic abilities, knowledge and weaknesses are defined by Attributes. These represent the characteristics you were born with, or acquired in your formative years. These range from physical Attributes, such as Agility and Fitness, to mental proficiencies such as Willpower and Knowledge. Attributes are ratings that are used to modify a dice roll (a value of zero represents an average person). A detailed description of all Attributes is found in the CORE rules (section 2.1.1).

You will now purchase Attributes to rate your abilities. You have 50 Character Points (CPs) available: the cost in CPs of a given Attribute rating is listed in the *Attribute Costs* table. (Some Sterotype may affect the amount of CPs available.) Purchasing very low stats "gives back" some CPs. A rating must be purchased in all ten Attributes. If any CPs are left over, each point becomes one Emergency Die (see CORE rules, *Emergency Dice*, section 2.5) or a Skill Point (see next section), at your choice.

Though basic Humans cannot have Attributes above +3 or below -3, the cost table can be extended further. The point cost is equal to the Attribute plus one, squared (thus, +4 would cost 5 x 5, or 25 points). For negative Attribute, the cost is the rebate in points (thus, -4 would cost -3 x -3, giving back nine points).

ATTRIBUTES

Name (Abbreviation)	Description
Agility (AGI)	Physical prowess and coordination
Appearance (APP)	Physical comeliness
Build (BUI)	Physical size and mass
Creativity (CRE)	Mental innovation and quick thinking
Fitness (FIT)	Physical conditioning and endurance
Influence (INF)	Charisma and persuasiveness
Knowledge (KNO)	Education and logical thinking
Perception (PER)	Alertness and ability to discern details
Psyche (PSY)	Mental health, empathy and luck
Willpower (WIL)	Mental endurance and conviction

ATTRIBUTE COSTS

Attribute Rating	Character Point Cost
+3	16
+2	9
+1	4
0	1
-1	0
-2	+1*
-3	+4*

* These values are added to available CPs instead of being subtracted.

▶ STEP SIX: SKILLS

While a character's Attributes define his potential, his Skills define his actual abilities. Skills are used in action tests, where a number of six-sided dice equal to the Skill level is rolled and the highest number picked. Modifiers are then added to the result, including situation and Attribute modifiers. The latter will vary according to the task at hand (see CORE rules section 2.2).

The three columns of the Skill List are Name, Level and Complexity. Skill Level (Lvl) and Complexity (Cpx) are the same terms that were described in *Silhouette Basics*, section 1.2 of the CORE rules. Skills are used to determine the number of d6 rolled when attempting an action.

Skill Levels: You should now choose Skills for your characters. Starting characters have 70 points to spend on Skills; the *Skill Costs* tables list the Skill point costs for both Level and Complexity. (Some Sterotype may affect the amount of SPs available.) Starting Skill Levels and Cpx are generally low, but can be improved through experience.

SKILL LEVEL COSTS

Skill Level	Cost
1	1
2	4
3	9
4	16
5	25
6	36
7	49
8	64
9	81
10	100
Specialization (each)	5

Skill Complexity: All Skills begin with a free Complexity of 1. Additional levels can be purchased at a cost in Skill Points (see *Skill Complexity Costs* table). A high Complexity allows the character to use higher technology or more versatile tools with his Skill, and also provide him with additional breadth of knowledge that will make completing a task easier. Complexity is noted as a second number after a slash, such as "2/4" for a Skill level of 2 with a Complexity of 4.

Unless specifically noted in their description, all Attributes and Skill tests, equipment and weapons are Complexity 1.

SKILL COMPLEXITY COSTS

Skill Complexity	Cost
1	Free
2	4
3	9
4	16
5	25

Skill Specialization: A character may obtain a Skill Specialization at a cost of 5 Skill Points. A Specialization gives the character a +1 modifier to his Skill test totals under certain conditions. For example, a soldier could have a Small Arms specialization in "rifles," and thus add one to every roll made while using a rifle.

A character may purchase multiple different Specializations in the same Skill, but no more than one Specialization (i.e. +1 bonus, maximum) can be applied on a single die roll. Players may be tempted to focus their characters at excelling in a few Skills by purchasing specializations and high levels in three or four Skills. Quite often, the advantages of this are more than offset by the inflexibility of the character, which will surface whenever the Gamemaster thrusts him into unfamiliar situations.

Specializations are usually noted either as a footnote to the Skill entry or, if space allows, right after it in parenthesis.

▶ STEP SEVEN: SECONDARY ATTRIBUTES

The Secondary Attributes are a group of five ratings that are neither Attributes nor Skills but are dependent upon them. All are computed from the charater's Attribute and Skill ratings. They are detailed in *Secondary Attributes*, section 2.3 of the CORE rules, and are summarized below.

SECONDARY ATTRIBUTES

Name (Abbreviation)	Description	Formula
Strength (STR)	Raw physical strength	(BLD + FIT)/2, round towards zero
Health (HEA)	Physical well-being and resistance to disease	(FIT + PSY + WIL)/3, round off
Stamina (STA)	Physical endurance and wound resistance	(5 x (Build + Health)) + 25, minimum 1
Unarmed Damage (UD)	Hand-to-hand Damage Multiplier	3 + STR + BLD + Hand-to-Hand Skill level, minimum 1
Armed Damage (AD)	Melee Damage Multiplier	3 + STR + BLD + Melee Skill level, minimum 1

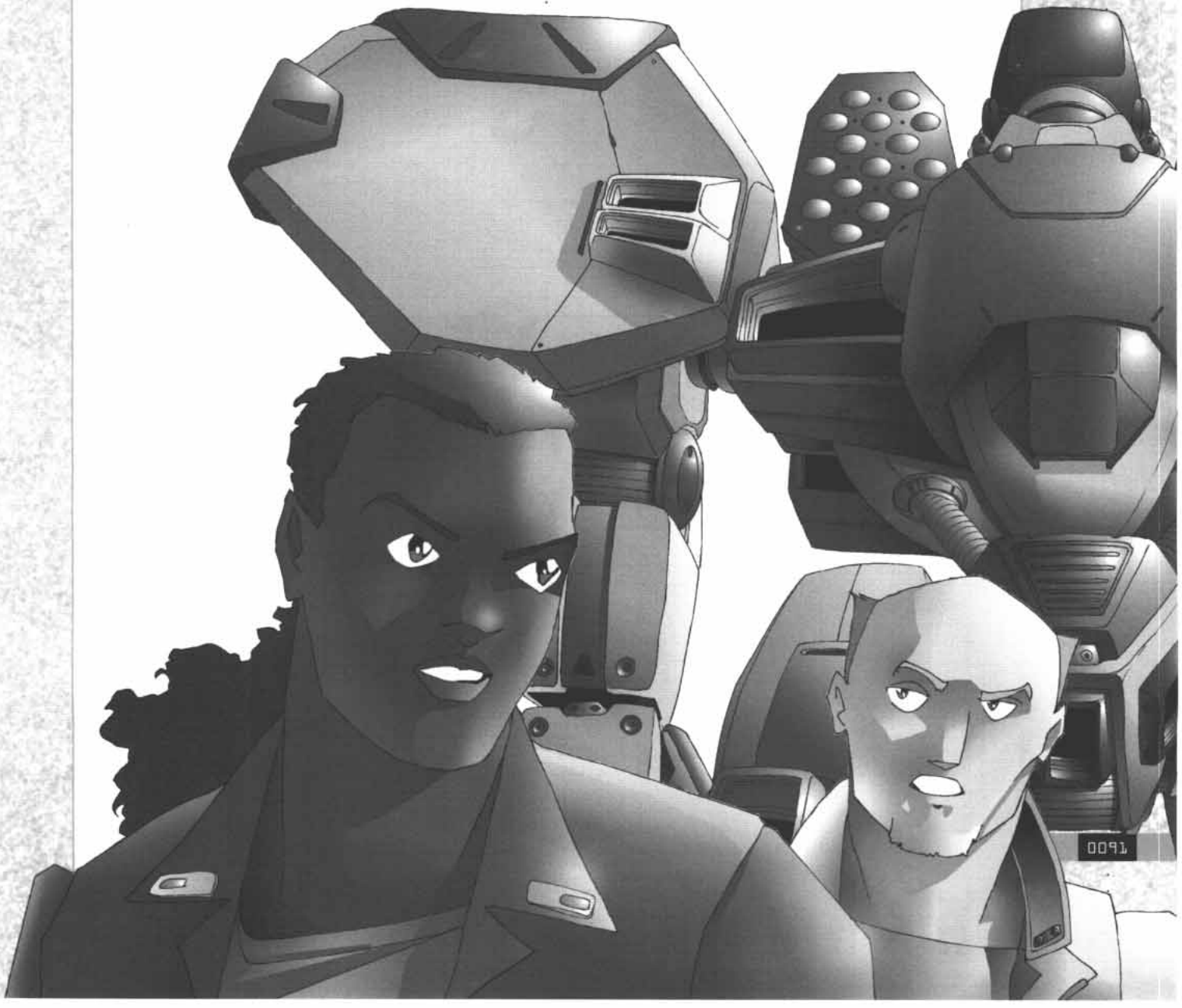
▶ STEP EIGHT: ADDITIONAL DETAILS

Injury List and System Shock: These are a measure of how much physical punishment a character can receive before being wounded. The numbers indicated are compared with the total damage received to determine the extent of injury in combat. See *Injury Levels* and *System Shock* in section 3.5 of the CORE rules, *Injuries*.

Weapon List: This is a list of the weapons carried by the character (if any). The list includes columns for weapon type, damage, ranges (short, medium, long, and extreme), and other notes. *Note*: personal weapon damage is on the Personal Scale, not the Vehicle Scale (see *Mechanical Action*, section 4.1 of the CORE rules.

Equipment List: Below the Weapon List is the Equipment List. Prized belongings and items that are carried by the character should be listed here (see Chapter 6 for sample items). The Armor points of personal armor should be noted in brackets after the item name, for example Armor Vest (+20).

Description and Personal History: The character sheet provides some space to note details of the characters physical appearance and background. It is often best, however, to take a separate blank sheet to provide a fully detailed history and visual portrait of the character. Once the character's look and feel are decided upon, a name should be chosen. If time and talent permit, a drawing of the character is always a nice addition.



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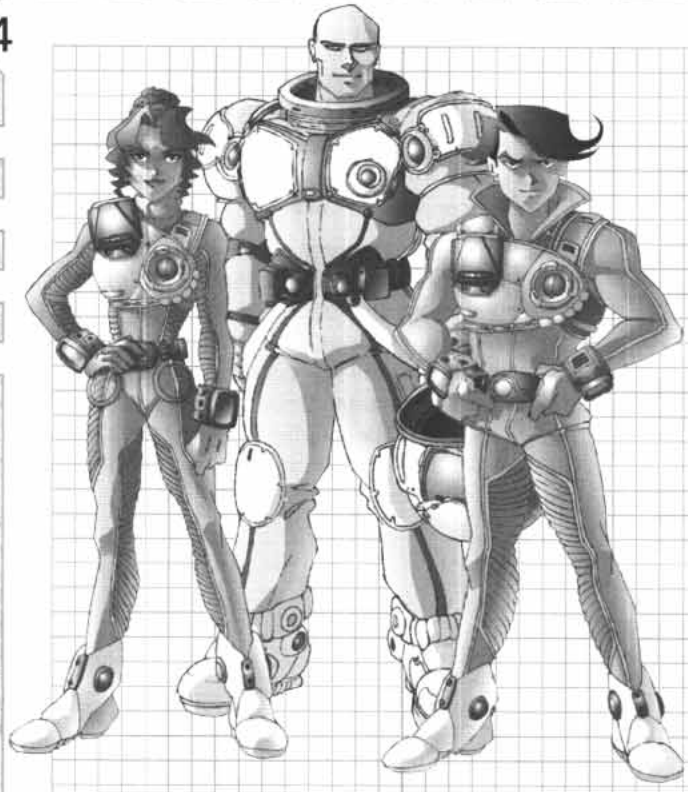


SPACERS

As humankind expanded into space, it developed fashion suitable for that environment. While most people wear standard clothes inside the (safe) colony cylinders, many workers prefer to wear a light pressure suit — also known as a vacuum suit — for safety. Some are forced by their job to wear even more extreme protection, like the explorer (middle).

SOLAPOL

The Solar Police has a large mandate, and has a result its agents vary greatly in appearance and abilities. The people shown here represents three common facets of the organization. From left to right, the characters shown here are a commando, a security officer, and an investigator.

AGENTS

The solar system is a vast place, and there is always a way to contact someone to perform a needed tasks. This can range from a private investigator or operative (at left), a well-connected researcher (center) or even a mercenary (at right). The latter are obviously more common within the more chaotic societies, such as Earth and the Belt.

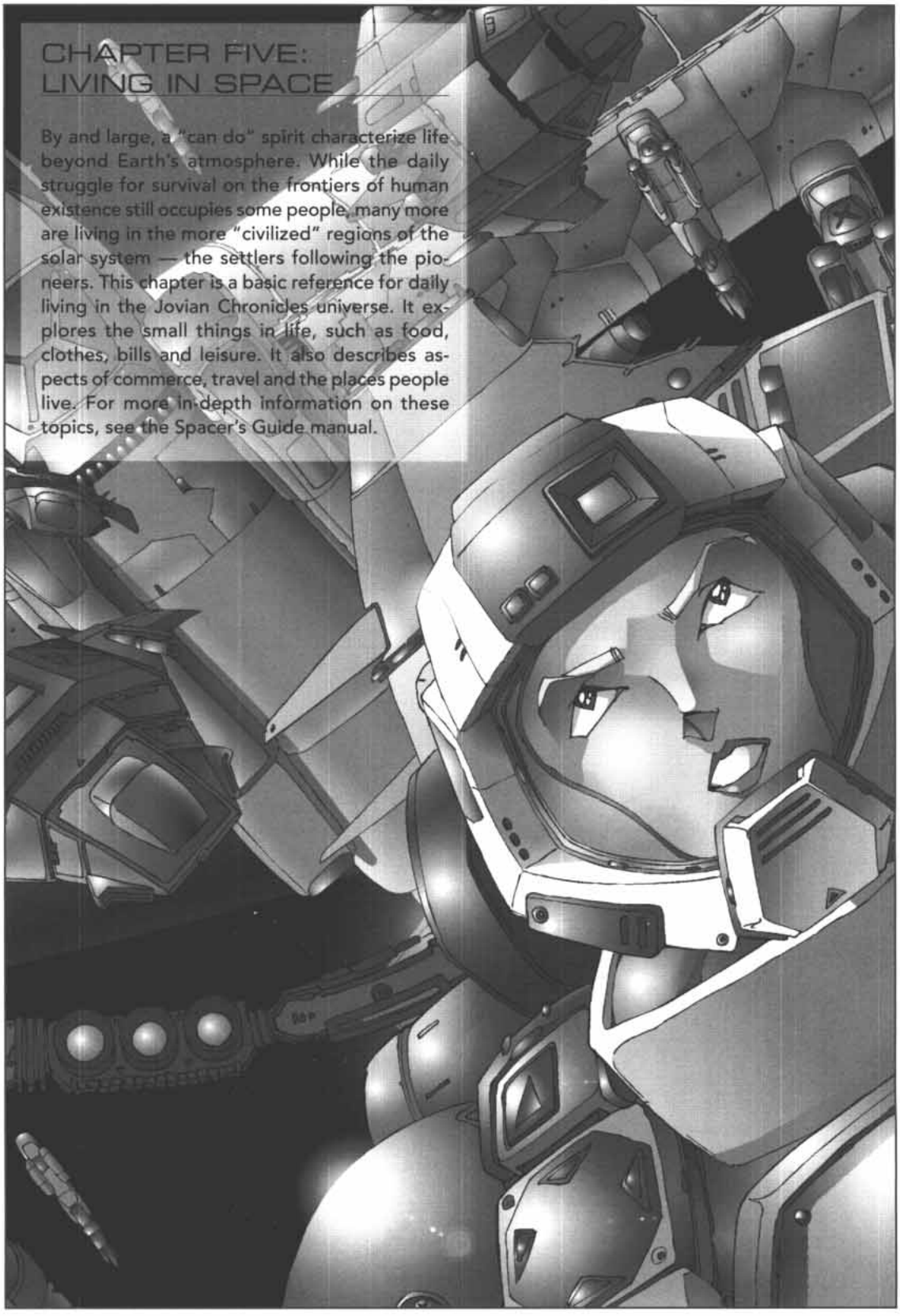
SOLDIERS

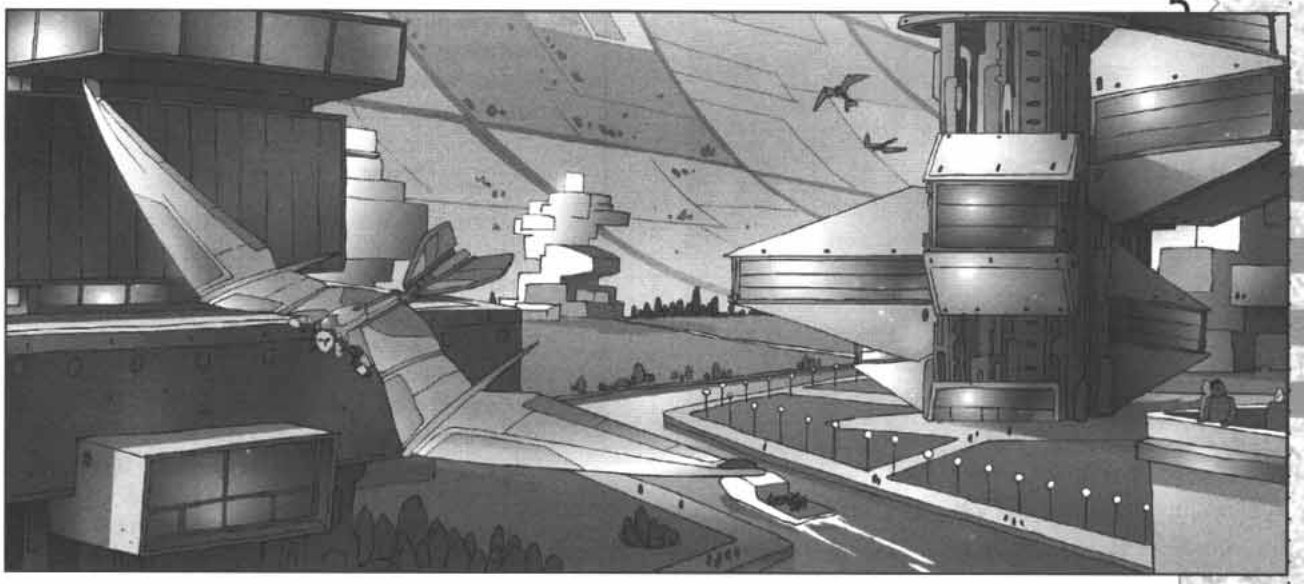
The Jovian Confederation has, since its foundation, recognized the need for a strong defense. The soldiers shown here are, from left to right, a ship's crewwoman (the JAF is a fully integrated service), a fighter pilot and a marine wearing the standard Jovian military pressure suit.

5

CHAPTER FIVE: LIVING IN SPACE

By and large, a "can do" spirit characterize life beyond Earth's atmosphere. While the daily struggle for survival on the frontiers of human existence still occupies some people, many more are living in the more "civilized" regions of the solar system — the settlers following the pioneers. This chapter is a basic reference for daily living in the Jovian Chronicles universe. It explores the small things in life, such as food, clothes, bills and leisure. It also describes aspects of commerce, travel and the places people live. For more in-depth information on these topics, see the Spacer's Guide manual.





▶ EVERYDAY TECHNOLOGY

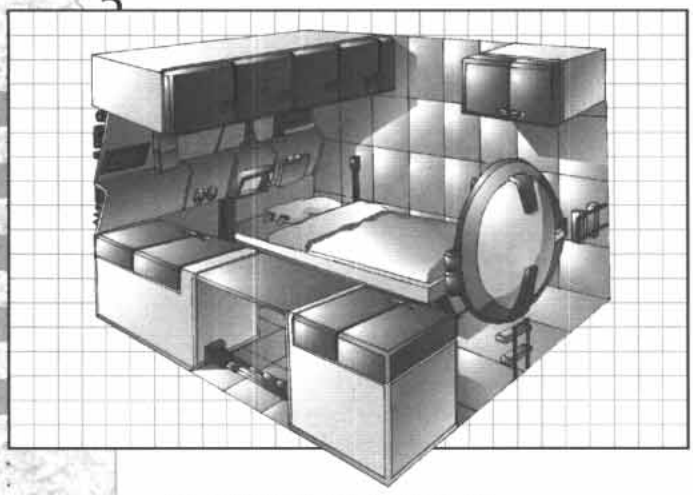
Scientific progress was somewhat slowed in its relentless advance by the tumultuous course of human history between the end of the twentieth century and the present day. The hard times on Earth and the much more urgent problem of survival in the colonies restricted research to areas with immediate practical applications, such as warfare and recycling. Thus, while leaps were made in emergency medicine, weapons, and spaceship design, little or nothing else received much attention.

▼ SPACE HABITATS

It is impossible to adequately convey with words and small pictures the unbelievably crowded nature of life in the 23rd Century. Despite its size, Joshua's Station (a major Jovian spaceport station) has a population density of over 7,500 persons per square kilometer. This is, by colony standards, spacious — Orbitals around Earth, with populations exceeding fifteen million people, can have population densities in excess of 20,000 persons per square kilometer! By comparison, late 20th century Hong Kong, one of the most crowded cities on Earth, had a population density of just over 5,000 persons/km^2, although some heavily populated districts had densities of about ten times that ratio.

Consideration and politeness are paramount in space society. At any given moment, about a third of the people on the station are asleep and would prefer not to be disturbed by loud noises or parties. On the street, careful navigation is necessary to steer a clear path through the crowds. Waiting one's turn is a fact of life; on occasions, there are even lines of lovers waiting patiently for use of park clearings in which to propose marriage.

Spacers would not normally experience seasonal changes. For the benefit of mental health, however, the environment often simulates changing conditions of an Earth-type seasonal round. Many artificial environments will cycle between two or three preferred Earth-based variations. It is not uncommon for the population to vote for an extension of a particular season, or to change the choice of a seasonal cycle. Temperature, humidity and hours of "daylight" are the most common variables, but some environments do have the ability to provide light precipitation. It is also common for night not to be completely dark, but maintain a minimum level of lighting. Within colony cylinders, the effect of dawn and dusk is achieved by progressively modifying lighting levels from one end of the cylinder to the other, either by moving the external mirrors or by adjusting the sunline's output (see further).



◇ LIVING QUARTERS

The average living space for a Jovian citizen (and most spacers as well) works out to a room roughly five meters by three meters. While this is larger than many modern college dormitory rooms, such a space restriction is imposed for one's entire life. A good way to get players into the "mood" of space life is to map out a five-by-three-meter area and ask players how their character's living quarters are arranged, reminding them not to forget such details as sanitary requirements and the necessity of purchasing separate parking facilities. Even allowing for folding beds, multi-purpose tables and various innovative wall storage locations, most player characters will find themselves rapidly running out of space for all their equipment, prized possessions and basic needs (such as clothing). If someone insists on owning one of every available heavy weapon, they'll have to sleep on them.

Jovian characters (and spacers) should not be overly stingy or private individuals. The limited space means that resources which one takes for granted on Earth may only be owned by one person in twenty, or less. It should be customary for players to visit their neighbors (and be visited in return) in order to borrow a cup of sugar or a specific music chip. One can expect to find more than a few such requests left on one's message device whenever coming home from work or play.

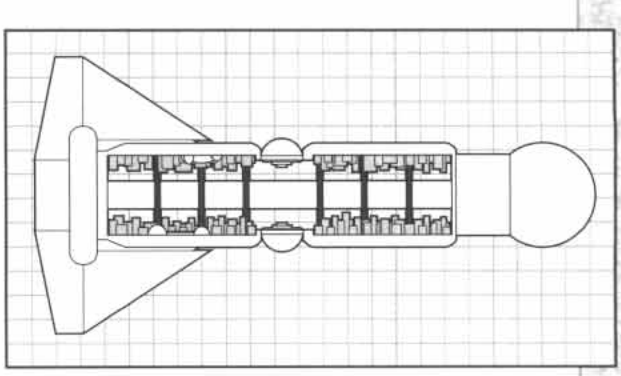
Things spacer characters should generally forget about are bathtubs, large musical instruments, gourmet home cooking and big collections of just about anything. The average Jovian is too busy trying to find a place to stick his shoes without bothering with a piano or fondue pot. Possession of one such space-inefficient item suggests an extreme fondness with its associated art or science, however, and can be an excellent way to define one's character.

◇ COLONY CYLINDERS

Colony cylinders are the single most recognizable symbol of Humanity's conquest of space. While there are many kinds of colony cylinders, encompassing a bewildering array of shapes and sizes, all are organized along similar principles. Colony cylinders enclose a vast, pressurized volume within a layered shell of metal and rock. The interior surface, thanks to the gravity induced by the cylinder's slow rotation on its axis, becomes a tremendous area of habitable land. In the O'Neill configuration, only fifty percent of this area can be used for human habitation, the other half being occupied by the giant windows used to illuminate the interior. The windowless Vivarium cylinders, on the other hand, use a powerful lighting system, called a sunline, which runs the length of the rotational axis; this doubles their habitable surface area for the same basic geometry and volume.

The environment often overwhelms those new to colony cylinders. It is no small feat to learn to live within a world wrapped around by the sky. Usually people board a colony cylinder by way of a dock located on the axis at the end of the cylinder. On occasion, a system of shuttles that depart and arrive tangentially from the cylinder skin is used as an alternative. In either case, the newcomer will soon be introduced to a well-developed public transportation network that uses electric cars and subways to reach every part of the colony rapidly.

Mild weather can be expected within a cylinder. The larger the colony, the more varied the weather can become, but it is never allowed to become strong enough to cause damage.



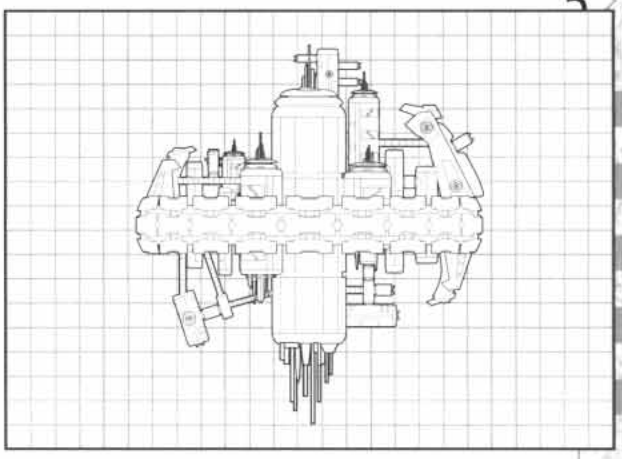
◇ ASTEROIDS

Asteroids are among the most technically challenging of all the environments that humans have colonized. One massive terraforming solution doesn't fit all: a series of unique challenges is discovered with each new rock. The vast majority of asteroids — including almost all colonized asteroids — are found in the main Belt between Jupiter and Mars. For the most part, the inhabitants are Nomads, though each solar nation maintains a few asteroid habitats under its own flag for research, reconnaissance and military logistical support purposes. Even the nations' outposts, however, usually rely heavily on expertise gathered by decades of Nomad culture.

People live and work in microgravity conditions, either inside the asteroid itself or in pressurized structures constructed on its surface. When asteroids were first inhabited, it was primarily for commercial gain, with teams of specialized miners spending shifts measured in years on a single asteroid before returning to Earth. In these days of interplanetary commerce, the majority of those living on asteroids are doing so as a part of the clan-based Nomad lifestyle, and no longer for short-term financial gain.

Most asteroids are irregularly shaped and provide little gravity. When colonized they are almost universally equipped with a gravity wheel for medical reasons. While long-term asteroid dwellers may not think they have need of the dense bones and strong heart muscles of their dirt-bound ancestors, a great deal of biomedical expertise disagrees with them. Sometimes a particular rock may prove unsuited for a gravity wheel or even a simple centrifuge. In such case, the inhabitants are condemned to a largely losing battle waged with exercise and drugs against the threats of calcium loss and muscular atrophy. Few, if any, of those natives will ever be able to set foot on a planet again.

Asteroids are challenging environments for visitors. While some of the more trade-oriented outposts may have areas optimized for outsiders, the majority of asteroids consist of aphazard warrens with little overall rhyme or reason to guide the uninitiated. A spacer is likely to show little sympathy to a clumsy visitor, and tourist ignorance will likely be seen as a danger to the host and his family.

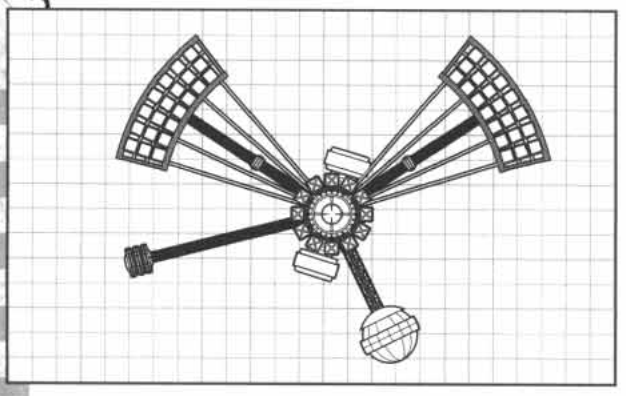


◇ OTHER INSTALLATIONS

Many people still live in smaller space facilities. The primary difference is the lack of a large open pressurized volume: as a result, the environment is much less world-like. Most of these smaller outposts rotate, or at least have a rotating section, to facilitate long-term habitation.

Life on these stations is usually dominated by the particular reason for its existence. Even when that purpose is military, a space station usually has a significant number of civilian personnel aboard to provide for its daily needs. In the majority of these cases, the commanding officer is also granted the title of military governor, providing him with authority over civil functions.

Stations with a commercial purpose show greater variation. Some are bustling trading posts whereas others thrive on secrecy, conducting elusive investigations on the edge of the Edicts and beyond. More common are smaller outposts that serve specific needs: cargo-handling stations around Jupiter, satellite repair stations in orbit of Mars and terraforming observation stations above Venus. Life aboard any of these is controlled by two factors: the culture from which the station is an offshoot, and the physical layout of the station itself. In general, these smaller stations have to deal with some of the same technical issues encountered by Nomads in the Belt, but they usually also have a much larger and closer industrial base from which to draw upon to solve these issues. While technical aptitudes are prized by the citizens, it is not so crucial to be entirely self-reliant since help is never far away.



▼ SPACE TRAVEL

Space is a three-dimensional environment that does not lend itself to the usual standards of orientation and motion that are applied on a body with gravity. Whenever possible, spacecraft travel in orbits, using gravity to propel motion while conserving fuel resources. A central body — planet, moon, or sun — is used as a reference point for describing orbits; as orbits change, so can the central body used as the reference point. For example, a planet is used as a reference for orbits about it and making the transfer to an interplanetary orbit, but the latter is described relative to the sun. One or more elliptical or hyperbolic arcs define transfer orbits between planets, orbits or between any other two points in space.

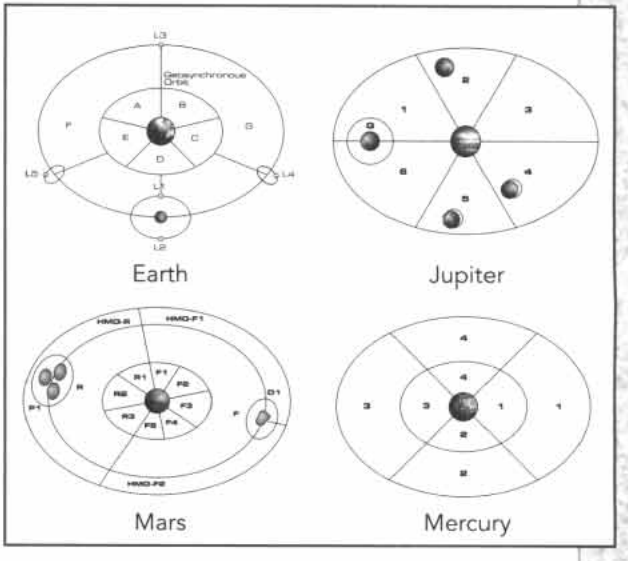
Planet-synchronous orbits place the craft above a fixed point on the planetary surface. Sun-synchronous orbits place the vessel in a fixed orbit with respect to the sun about a planet. For example, Mercurian colony cylinders are in a sun-synchronous orbit that constantly places the cylinders in Mercury's shadow. Polar orbits are perpendicular to equatorial orbits (which follow the equator). The major advantage of a polar orbit is the vessel's ability to observe the entire surface of the orbited planet or moon. While this coverage is not complete or constant, the vessel will track across the entire surface area after a number of orbits.

◇ SPACE TRAFFIC

Planetary traffic is defined as vessels moving into, out of, or within a space traffic control (STC) zone. Prior to their entry into an STC zone, spacecraft are required to notify the STC center of their arrival and follow the instructions of the controllers. While the filed flight plan gives the vessel's orbital insertion data, the controllers may designate new orbits based on traffic and the vessel's final destination. If a vessel enters the STC without permission, it could be assigned a fine (up to 50,000 credits) or suspension of docking privileges. Automated beacons located throughout the STC zones act as sensor platforms and are also bearing markers for directing traffic.

Vessels performing gravity whips or aerobraking are given priority clearance, provided the maneuver is indicated on the flight plan. Military vessels are automatically given priority clearance, though they must still notify the STC center to ensure orbit conflicts are resolved. Vessels may request permission to perform maneuvers not indicated on their flight plan, but must be prepared to receive a less than ideal orbit and burn more reaction mass.

Restricted space is an area forbidden to unauthorized vessels. There are several possible reasons for restricting an area of space, the primary one being military (for prototype testing or war games, for example). Another reason is protection, whether to protect something in the area (like sensitive scientific experiments) or the visiting ships themselves (from dangerous natural occurrences); non-military restricted areas are generally set up by government agencies for public protection. Consequences for violating restricted space vary widely and include fines, detention, confiscation or even destruction of the offending vessel. No passage into restricted space is permitted without authorization, and evading detection is unlikely without taking extreme precautions. Those that do have authorization must still follow the normal rules of space navigation.



GAME EFFECTS

Real-life space navigation is a complex undertaking, and well beyond what can be easily incorporated into a roleplaying game. As it applies to game play, only spontaneous maneuvers require the Pilot (Space) Skill. Planned maneuvers are entered into the vessel's flight computer, which applies thrust as required, without further human intervention. Properly generating and entering a flight plan is the job of the navigator, and uses the Navigation (Space) Skill. If a vessel's navigator is a non-player character, the Gamemaster is responsible for describing the flight plan, and deciding whether to make any Skill Tests. If the vessel's navigator is a player character, the player controlling the navigator should handle navigation. For routine flights (traveling free from interference, using known routes) no Skill Tests are required. Failed Navigation and Piloting tests burn up more reaction mass; catastrophic failure will take the ship off course (Gamemaster's call).

USN SPACE NAVIGATION AUTHORITY

The United Solar Nations Space Navigation Authority (simply referred to as SpaceNav) is descended from the old Earth International Space Traffic Control Office. SpaceNav is responsible for devising and maintaining navigational standards throughout the solar system. While the space traffic control systems of individual nations differ slightly, common standards set by SpaceNav ensure timely, accurate and safe passage for all vessels. Navigation terminology, flight plans, orientation and vector data, flight rules, flight recorder data and navigation communication protocols all follow standards set by SpaceNav. The Space Navigation Authority is also responsible for maintaining central databases for flight plans and lost vessels, and the maintenance of navigational beacons in specific solar orbits. The Solar Cross has a close relationship with SpaceNav, with special database access for rendering timely humanitarian assistance.

NAVIGATIONAL LIEN

A lien is defined as "the right to hold another person's property until a debt on it is paid," and such is the case with a navigational lien when applied to spacefaring vessels. The transient nature of commercial and private vessels means that collecting debts on cargo, services performed (or not), or the vessel itself, is extremely difficult and expensive to undertake actively. A navigational lien against a vessel restricts it from lawfully entering or exiting any STC zone without advancing a minimum fee toward payment of the debt. If the vessel declares an emergency, it is allowed to enter and seek assistance, including docking, but may not leave without paying the fee, nor may it load or unload any cargo (false declaration of an emergency results in a 1,000,000 credit fine). Personnel are not restricted to remain on the vessel, so long as the vessel itself stays out of the STC. Intentional violation of these navigation restrictions (including the false declaration of an emergency) is considered de facto consent to submit to binding arbitration in the matter. The vessel is then impounded until the arbitrator rules.

◇ REFUELING PORTS

Refueling ports, or fuel depots, are usually one or a few small- to medium-sized asteroids with high volatile content placed into various orbits about the sun and planets. Also called cyclers, these asteroid ports carry automated systems that process and store the volatiles for future use by visiting ships. Fuel depots are also created by concurrently mining minerals and removing the volatiles to storage within mined sections of the asteroid. High-traffic orbits will have several cyclers available, with multiple fueling stations. A ship requires an access code in addition to the orbital information for the designated fuel depot. Nomads are frequently contracted to maintain the automated production facilities on these cyclers.

The Jovian Confederation has established the greatest number of fuel depots in the solar system. In addition to regular shipments of hydrogen to the Trojans from the Jupiter gas mines, the Jovians regularly contract Nomad groups to create roving refueling ports within the large amount of space the Confederation controls. The JAF has numerous refueling ports hidden within the aster-

oid belt, as do the CEGA Navy and CVNA (the Venusian navy). Military fuel depots often have stores of munitions and supplies in addition to the fuel stores, so they are equipped with automated defense systems. Most military depots also have extensive sensor suites for collecting intelligence about local traffic.

◇ PASSENGER SERVICES

Fares for passenger and cargo travel are based on mass and distance traveled, and also by the type or class of travel. Even with the belliqious rhetoric flying between CEGA and Jovian politicians, the amount of traffic within the solar system has never been higher. At the same time, the increasing amounts of cheap arms on the market — legally and illegally — have made some routes more susceptible to pirate attacks.

There are many companies offering passenger services between the planets at any one time. Numerous independent vessels also offer service on irregular schedules. People who don't mind taking a little longer to travel to their destination can sometimes find a berth on a Mercurian Merchant Guild sail ship, though normal practice requires passengers to work with the crew as part of the passage price.

Passengers require three things before they can board. First, their personal identification and any related travel documents for entering and leaving the nation that they depart from or arrive at. Second is their ticket. Finally, they require a medical certificate that states their ability to live in low- or zero-gee conditions, and any health concerns that the medical staff should be aware of. Sleeper Class passengers must undergo an additional exam to determine if they are fit to endure long-term somnolence without adverse affects. Spacesick passengers are treated with free drugs to allow them to move to and from the vessel while docked.

- Passenger service providers will not allow passage to seriously ill persons, or persons with contagious or communicable diseases. Any person suffering suspicious symptoms, or that has a suspicious medical history, is redirected by customs officers for an onsite medical exam. The person is effectively quarantined for the duration of the examination and the time required to return test data. An international treaty does not allow medical quarantine for longer than 72 hours without sufficient medical evidence of risk.

Ticket Prices: The base fare for interplanetary passenger travel is equal to the square root of the distance traveled in kilometers. For example, a journey between Earth and Mars is 272.6 million kilometers on average: the square root equals 16,510 credits. This fare is then subject to a Transit Multiplier based on the passenger's Class.

For passengers weighting more than 115 kg, an additional multiplier of 1.5 is applied; for those weighting less than 50 kg, an additional multiplier of 0.75 is applied.

Additional cargo carries a rate increase of 25% of the fare per 20% increment of additional cargo. For example, the charge for transporting 200% of the allowed cargo limit is equal to 125% of the passenger's fare.

Lifting and Descent Fees: Transportation between a planetary surface and orbit incurs a fee. Purchasing roundtrip tickets provides a discount of 25% over the purchase of two individual fares. If traveling via a Venus or Earth skyhook (see below), tickets are discounted by 25%. The modifiers for weight given above are also applied to lifting and descent fees. Cargo fees for passenger baggage are equal to a single ticket as a percentage of 75 kilograms. For example, a passenger lifting 50 kilograms from Earth will pay 66% of the usual 845 credit fee, or 558 credits (rounded up).

TRAVEL COSTS

Class	Accommodations	Cargo (kg)	Transit Multiplier
First Class	Private Suite, access to shipboard amenities	300	x4
Second Class	Cabin, access to common facilities	200	x2.5
Business Class	Cabin, priority access to computer and comm	50	x2.5
Third Class	Cubicle	50	x2
Economy Class	Dormitory	20	x1.5
Sleeper Class	Hibernation pod	50	x0.5

LIFTING AND DESCENT FEES

Location	Lifting Fee	Descent Fee
Mercury	313 Cr	157 Cr
Venus	772 Cr	1220 Cr
Earth	845 Cr	845 Cr
Moon	178 Cr	89 Cr
Mars	386 Cr	231 Cr
Titan	198 Cr	242 Cr

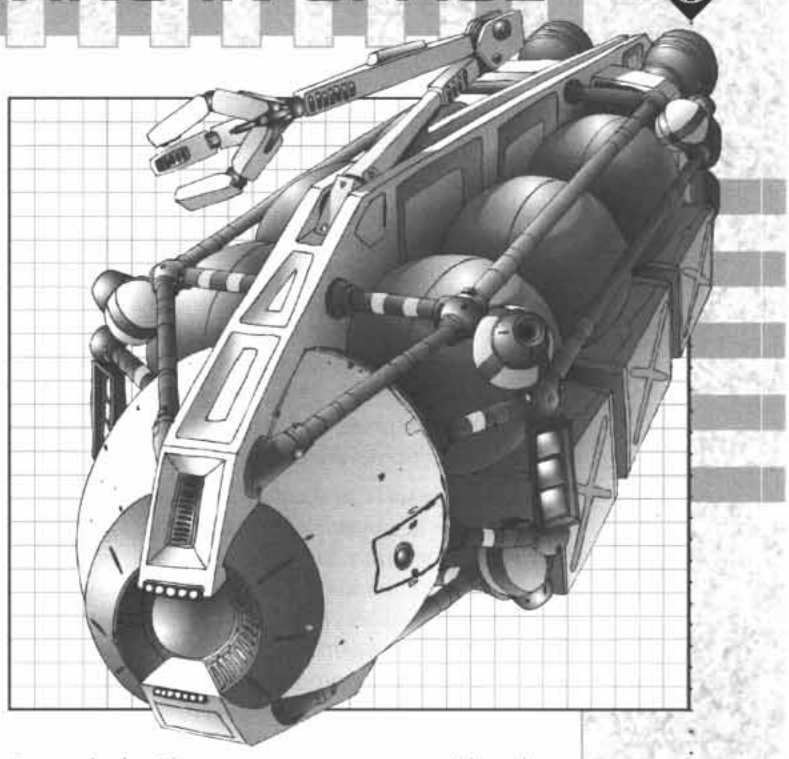
◇ CARGO TRANSPORT

Merchant Guild ships are the most inexpensive manner of transporting cargo between planets, but they are not the most numerous or timely. Cargo vessels of all kinds, sizes, and affiliations are common throughout the solar system. The transport of cargo between the Jovian states on the Hanson Circuit (see sidebar) is often reserved for government use, and is fairly expensive for all but the most time-sensitive commercial cargoes. Time-sensitive transportation is normally reserved for optimum orbits and commands the maximum price for services rendered.

Transport Costs: Since mass is the all-important arbiter of the cost to move anything around the solar system, any cargo other than passenger travel is based on a per-kilogram formula. The base cost per kilogram is the square root of the distance between the two points, in millions of kilometers (for example, shipping a kilogram to Mars would be the square root of 272.6, or 16.5 Cr). The appropriate transit multiplier is then applied. Because of the slow speed of Guild sailships, a 25% rebate is applied to the final cost.

CARGO TRANSIT MULTIPLIER

Cargo Type	Cargo Transit Multiplier
Gas	x0.1
Liquid	x0.25
Bulk	x0.5
Secure	x0.5 to x2.0
Specialty	x0.5 to x3.0



Cargo docks: These are open structures with multiple spines for securing cargo containers until transfer to their next destination. Since not every ship needs, wants, or is allowed to dock at the cargo's destination, the cargo yard simplifies the process of cargo delivery. The owner of the yard usually buys the delivery contract and consolidates the shipments. Managing to run a yard profitably is one of the most difficult businesses in the solar system. It is not surprising that these cargo yards are often filled with corruption, owing their success to a special relationship with a colony dock master or similar underhanded deal.

Skyhooks: These are a cheap way of defeating the effects of gravity when moving goods between the surface of a planet and space. Instead of extending all the way to the planetary surface, skyhooks are space stations with long tethers that end inside the upper atmosphere to allow jet aircraft to bring items to the end of the skyhook; the cargo is lifted to the transfer station (TranStay) or orbital port (OrPort), and cargo is also brought back down. Cargo is commonly moved to an orbital dock from the TranStay to minimize low priority traffic since there is limited space around the structure. The orbital port (OrPort) is the most common docking point for ships since it has a higher-velocity orbit (i.e. a ship does not need to slow down as much). Refer to **Mechanical Catalog 2**, pages 82 to 87, for more information about skyhooks.

5

HANSON CIRCUIT

When the Jovian Confederation was formed, one of the most important questions for the fledgling nation was how to maintain a strong link of trade between the three states. Yvonne Hanson, a scientist on Elysée, presented a proposal to the newly convened Agora in 2115; the Jovian Confederation Inter-State Transit Project was begun on April 15, 2115. The project took a decade to complete and required almost all complete attention of the entire Confederation.

Called the Hanson Circuit after its creator, the transit system is comprised of nearly two hundred computer-controlled booster sleds, each over two kilometers long. Starting from colossal space-based stables near Callisto, the boosters sled make their way in two continuous circles, one in each direction, around the orbit of Jupiter, taking over six years to complete each circuit. At each Trojan State, specialized sled-liners latch on and ride to the neighboring state. The entire process is almost entirely automated, requiring only periodic maintenance. Most passengers travel Sleeper class for an inexpensive average price of 1000 credits for a one-way ticket between states. For those that make the trip awake, the ticket will cost between 44,000 credits (Economy Class) and 120,000 credits (First Class).

◇ EXTRA-VEHICULAR ACTIVITY

Extra-vehicular activity (EVA) involves leaving the confines of an artificial environment for a journey across non-Earth landscapes or through the void of space. The two constants of EVAs are spacesuits and airlocks — the first is required for survival and the second is required for access. M-pods are another common component of EVAs around colony cylinders and vessels (where they are used for construction and maintenance), shipyards and cargo docks (where they are used for moving materials), and during travel and exploration trips (where they are used for moving and using large pieces of equipment).

It has long been standard practice to have the atmosphere in space habitats use lower than Earth-normal air pressure. Along with advances in materials and spacesuit design, the user can simply get into a spacesuit and enter an airlock to begin an EVA. (The pure oxygen atmosphere used in 20th and early-21st century suits required the user to pre-breathe oxygen for many hours to avoid decompression sickness.)

There are two sacred safety rules for EVAs: 1) one should never leave the airlock alone, and 2) someone else must double check one's suit before entering the airlock. While the first is not always possible in some circumstances, the second rule is never violated except in extreme emergencies.

◇ SEARCH AND RESCUE

Interplanetary space is huge region that can easily swallow the unfortunate for decades before they are found. A number of precautions are taken to increase the chances of rescue if something does go wrong. The first is the filing of a proper flight plan with the local space traffic control center. The second precaution is to provide position, course and status updates in regularly scheduled communications. Since comm systems keep a minimum of the previous 120 hours of message traffic in a recording loop, searchers can shorten their search by beginning at the missing vessel's last known location. The final precaution is to ensure that the vessel is properly maintained, especially its safety systems.

The Search: Once a vessel misses making regular communications, is overdue without notification, or declares an emergency via radio, the vessel is declared missing. Vessels in the area are required by international law to perform active sensor sweeps and attempt to re-establish communications. Any debris or other evidence of the missing vessel's possible location is transmitted on open frequencies and to the Solar Cross.

Once dedicated search and rescue (SAR) vessels arrive, they begin by following any reported evidence. Multiple search vessels increase the area covered by running parallel search patterns to cover a larger volume of space. Rescue vessels will often carry surplus exo-armors (with weapons and armor removed in favor of upgraded sensors and more reaction mass) to conduct search operations.

A major part of locating a missing vessel is detecting the signal from the vessel's Emergency Location Transmitter (ELT). An ELT (Comm +1, range 2000 km, operating duration 720 hours) is installed on all vessels and contains an independent power supply, system status monitor, navi-

gational computer with related sensors, and a transmitter. Large vessels will often incorporate a separate ELT in each major section. The ELT can be activated manually, or it will activate itself automatically in case of major malfunctions. As a secondary function, the ELT has a 24-hour memory loop that records critical system information.

The Rescue: The first priority of the rescue crews is to assess the condition of the target vessel and stabilize it. While rescue crews are dealing with the crippled vessel, additional craft conduct sweeps to recover any missing emergency life boats and escape pods.

Once the SAR crews have gained access to the vessel, rescue crews will locate and remove any survivors; failing that, the crews will remove any bodies. This stage also requires the crews to proceed with caution, since exterior inspections seldom reveal interior conditions. It may be necessary for the rescue crews to conduct some repairs to stabilize the vessel before proceeding with a search for survivors.

◇ SALVAGE

It is a sad fact of life that there is a constant need for people skilled in the recovery of vessels and property from the emptiness of space. Whether the vessel in question is a warship damaged in battle a week ago or a commercial freighter missing for a decade, there are people waiting for the recovery of the ship itself or the contents thereof.

Every component of most ships or structures in space is marked with a serial number for identification in case of disaster. A detailed database is kept, and the current whereabouts of those items is tracked whether they are in storage or being moved as cargo. The Salvage Office of the USN Space Navigation Authority maintains this database. Salvage operators pay an annual access maintenance fee of 50,000 credits, plus a find fee (1000 credits per search) for database access should they ever happen upon something.

While some salvage operators concentrate almost exclusively on items long missing, others prefer recent losses. The military conflicts of the past years have made such salvage work very lucrative. The governments involved issue regular contracts, and even commit to secret salvage operations in the hope of retrieving damaged enemy vessels. Depending on the condition of the hulk, the salvage teams can expect to get from 5% (if mostly scrap) to 50% (if largely intact) of the vessel's value.

Salvage operations are a dance between the recovery craft and the target. Combat salvage is even more delicate since the object is often rotating about multiple axes and will likely contain explosives. A large part of the salvage teams are EVA specialists who are proficient in numerous technical skills. Many salvage personnel are former shipyard workers, so they have an intimate knowledge of ship systems.

Salvage ships carry many heavy duty M-pods for stabilizing the orbits of vessels and moving recovered materials. Large reserves of reaction mass are carried to shift orbits, to fuel the salvage vessel's many auxiliary craft, and to tow salvage to port. A wide range of tools is carried to ensure efficient conduct of salvage tasks.

If more references on salvage are needed, the **Spacer's Guide** includes additional guidelines and extracts from the Solar Convention on Salvage.

◇ SPACE RACING

In many places throughout the solar system, people race space vehicles of all kinds: fighters, exo-suits, exo-armors, full-sized vessels or anything spaceworthy that people are willing to bet on. Many of the competitions are informal events that are organized on short notice, the most common being MMU and M-pod races between the many space construction crews. Some companies even hold formal competitions for their employees and with other companies. The races are often conducted as duels over insults or slights between crews.

Exo-suit racing is another popular sport. These races require an exo-suit pilot to navigate an obstacle course under partial or zero gravity conditions. Some stations and colony cylinders have built contained tracks inside, outside and through their structures for this purpose. Surplus space fighters and exo-armors are also used for racing, though usually through a larger course that can take them through several orbits of a planet or moon.

In the 23rd century, sailing through space has replaced sailing through the polluted waters of Earth. With faster means of travel available, solar sailing remains a challenging sport to master. The most successful solar sail racers are ex-Merchant Guild sail barge crew members or non-Guild racers that have put in time on a Guild ship as working passengers. The winner in solar sail races is determined by a complex system of calculations

based on craft weight, sail area (itself governed by racing classes) and time to complete the route. The Solar Cup Race is a quintennial (every five years) race from Mercury to Venus. Most of the entries are custom-built sailcraft or commercial designs modified for smaller crews and speed.

▼ COMMUNICATION

With the huge volumes of information being transferred on a daily basis, the infrastructure to support that transfer requires constant maintenance, improvement and expansion. As such, there are user fees associated with using voice and video communications as well as for accessing the SysInstruum — the solar system-wide Internet — through a public access network (PAN). Internal connections are made between access points within a single station, colony cylinder or settlement. External connections are made between access points in different stations, cylinders or settlements within a local area of space or planetary surface. For security reasons, any direct access to external SysInstruum nodes is forbidden.

Interplanetary communication is not an instantaneous occurrence between the planets. Even the closest planets require almost an hour for a message to make the trip there and back. The different orbital periods and distances require that multiple communication arrays are aligned with different points in space, including relay satellites when line-of-sight is blocked.

Lasers: Many space vehicles are equipped with at least one type of laser cannon because of its practically unlimited shot supply (if hooked up to the ship's main fusion reactor) and great accuracy. Lasers can also be used to send messages over very long distances (see table). In general, this is practical only for large installations or in emergency situations, since both the emitter and receiver must remain at near constant velocity during the transfer (i.e., not applying thrust — the space equivalent of standing still).

LASER COMMUNICATOR RANGES

Total Modifiers	Base Range Multiplier
+5	700
+4	120
+3	24
+2	6
+1	2
0	1
-1	0.5
-2	0.333
-3	0.25
-4	0.2
-5	0.167
Total Modifiers =	Accuracy + any modifiers (movement, damage, etc.)
Base Range =	100,000 km per point of Damage Multiplier

▼ SPACE HAZARDS

Space is a dangerous environment — people rely completely on technology for their continued survival. When that technology fails (either by accident, human error or deliberate damage), things get ugly really fast. Most of the problems are related to the air supply, temperature or radiation levels.

The contents and pressure of the artificial atmosphere present in all habitable areas are crucial in space — if either is improperly monitored and controlled, severe wounds or even death will result. Even if there is breathable atmosphere present, waste gases may take the place of oxygen in the bloodstream and damage sensitive organs.

Obviously, lack of oxygen is detrimental to human life. There can be several causes of oxygen deficiency: an excess of carbon dioxide in the atmosphere, defective air reserve or decompression. If the air supply is compromised, characters suffer as their bodies try to make do with insufficient resources.

See section 6.3 of the CORE rulebook for game rules on hazards, or the *Environment* section of the basic Open Gaming Rules.

Decompression: While experiencing a decompression emergency can be terrifying, it is actually one of the most survivable of spaceborne mishaps. The human body can survive unprotected exposure in space for longer than a minute, though the victim will suffer increasingly severe

physiological damage. Aboard military vessels during combat, all military personnel wear full spacesuits, and the vessel's atmosphere is lowered to near-vacuum conditions.

Slow decompression, either due to a minute puncture or a faulty seal, is less dramatic. An automated voice informs occupants of the time available to exercise this option. If there is insufficient time to exit the area, personnel must use an emergency spacesuit or survival bubble before they lose consciousness. The second option is to attempt to plug the leak or at least slow it down enough for help to arrive. The third option, a rather unpleasant and terrifying maneuver, is to hyperventilate to charge the bloodstream with oxygen and then attempt a "naked" spacewalk to another pressurized area such as an airlock (obviously, this option is not always available, and requires serious nerves to commit to).

Fire: This is the one of the most feared emergencies in an artificial environment. It is not the heat that poses the greatest danger, but rather the fire's voracious appetite for oxygen and the smoke, carbon dioxide and other compounds that quickly fill the air. The high concentration of oxygen means that fires burn with greater intensity and spread more rapidly than under normal earthbound conditions. All buildings and spacecraft are built to contain fires; rooms are layered with fire retardant materials, and all doors are equipped to close automatically when a fire alarm is tripped. Occupants can open a door to exit the room if the sensors on the opposite side deem it safe to do so (based on temperature and air quality).

The preferred option for extinguishing fires is to evacuate the atmosphere in the immediate area after it's sealed off. Both ships and buildings within open environments (like colony cylinders and surface settlements), are compartmentalized to facilitate this. The air is evacuated completely, or the section is flooded with an inert gas to "starve" the flames. Emergency oxygen apparatus for use by trapped personnel is stored in lockers at containment doorways and other strategic locations. Emergency spacesuits can also be used to limit exposure to fire by-products.

Radiation: In space, radiation is always a concern — vehicles are equipped with screen generators, and both space stations and colonies incorporate heavy shielding within their hull. Many phenomenons, natural or made-made, produce radiation, but only in certain situations is the amount large enough to cause damage (screen failure, etc.). The unit used to measure radiation is the rad. Absorbed rads remain in living tissues and material and are cumulative: if the radiation rules are used (see CORE rulebook), a tally should be kept of the character's current rad level.

◇ EVACUATION

The evacuation of several million people from a colony cylinder is the worst nightmare of disaster services across the solar system. There is little chance of evacuating an entire colony cylinder, or surface habitat, without some fatalities; emergency planners know that there will likely be many deaths, and do not publicize that fact. No cylinder has the lifeboats, spacesuits, or survival bubbles to evacuate the entire population: if a cylinder is so damaged as to require total evacuation, it is likely that a great majority of the population will be dead or dying already. In an emergency, the evacuation alarms will sound and provide instructions for moving to lifeboats and airlocks. Emergency services run evacuation drills in a random cylinder quadrant every few months to ensure citizens are familiar with the evacuation procedures.

Venus: Evacuation to the surface is not a viable option for a large portion of the population. Mobile emergency shelters that are lowered to the surface are only accessible to people on the lowest levels. Self-contained emergency shelters are located at regular intervals within the habitat's interior areas. The upper surfaces are equipped with mobile shelters that use rockets and deployable wings to lift the shelter away on a course for a neighboring habitat. The shelters are capable of landing on the surface, where they have an operational lifespan of twenty-four hours.

The Moon: Heavily compartmentalized constructions, with survival shelters both inside and outside, serve to protect the inhabitants. There are sufficient self-contained emergency shelter spaces to protect at least 75% of the expected population of the section for the full support lifespan of the shelter. Exterior airlocks have a large supply of emergency spacesuits nearby to allow the rapid evacuation of large numbers of people. Emergency shelters are also located along commonly traveled routes between settlements. It is considered a criminal offense to use the shelters in non-emergency situations.

Mars: Immediate evacuation is easier to conduct under the partially terraformed conditions, which allow people to simply leave with light pressure suits and oxygen masks. This simplicity gives evacuees the chance to set up deployable emergency shelters, or be picked up and moved to another habitat nearby. The primary concern of rescue workers is to minimize long-term exposure to the Martian environment. As on the moon, emergency shelters are also located along commonly traveled routes between settlements.

▶ ECONOMY

By the middle of the 21st century, globalization led to the integration of the world's major exchanges into a single exchange operating around the clock. The physical distances, and the associated communications time delay, separates the exchanges of the 23rd century once again and has also led to modern specialization by region: Mercury, Venus, Earth (surface only), Orbital/Moon, Mars and Jupiter.

The existence of separate exchange regions gave rise to new regulations concerning the trading of stocks and commodities. The first rule is that a company must have at least ten percent of its operating assets located in an exchange region to trade on exchanges in that region, with each region trading under a separate stock issue proportional to the total operating assets in the region. Second, the company assumes all risk involved with trading in multiple regions. For commodity exchanges, there is but one major rule: contracts may only be traded in the region of production.

▼ MONEY

The common currency of the solar system is the credit, which was originally derived from an average of all the old Terran currencies. These were unified despite much protest from several of the less influential nations in the middle of the twenty-first century. Each settlement issues its own script (such as the Orbitals' SHAREs), but the credit is used to compare them.

Credits are generally electronic in nature (i.e. data in banking computers), but actual cash is still available for casual transactions. Credits are issued by the Unified Monetary Council, under direct supervision of the United Space Nations, and as such are sometimes used as financial levers to try to coerce its members into following system-wide policies. A credit is roughly equivalent to a late twentieth century American dollar in terms of purchasing power. It is subdivided into a hundred centicredits, or simply cents — the usual abbreviations are Cr and ¢, respectively.

Belt settlements that have aligned themselves with a foreign nation often use that nation's currency internally and for conducting trade with that nation. Neutral settlements will use credits when absolutely necessary, but usually prefer to barter for goods and services. THC's Saturn facilities use the Jovian franc since THC is a Jovian corporation, but this is slowly changing to credits as the amount of international trade with Titan increases.

NATIONAL CURRENCY

Location	Currency
Mercury	Ration Point (aRP)
Venus	Yen (¥)
CEGA	Dollar ($)
Orbitals	SHARE (oS)
Moon	Dollar ($)
Mars Federation	Mark (FM)
Mars Republic	Mark (RM)
Jovian Confederation	Franc (Fr)

CURRENCY EXCHANGE RATES

	Credit	Ration Point	Yen	Dollar	SHARE	Fed Mark	Rep Mark	Franc
Credit	-	0.45	0.61	1.30	0.95	1.15	1.20	0.68
Ration Point	2.23	-	1.36	2.90	2.12	2.56	2.69	1.51
Yen	1.64	0.74	-	2.13	1.56	1.89	1.98	1.11
Dollar	0.77	0.35	0.47	-	0.73	0.89	0.93	0.52
SHARE	1.05	0.47	0.64	1.36	-	1.21	1.27	0.71
Fed Mark	0.87	0.39	0.53	1.13	0.83	-	1.05	0.59
Rep Mark	0.83	0.37	0.51	1.08	0.79	0.95	-	0.56
Franc	1.48	0.66	0.90	1.92	1.41	1.70	1.78	-

Note: A singular-valued note of the currency on the left buys the equivalent value of the currency along the top. For example, 1 Dollar is equivalent to 0.89 Federation Marks.

Monetary Security: The credit bills are printed on a special green polymer fiber with a tamper-proof holographic serial number and a watermark depicting the people and events of human history. Every eight years the UMC issues a new series of bills with a new historical theme (with the old bill remaining in circulation). The bills come in 1, 10, 100 and 1000-credit denominations. Centicredits are not issued as physical currency, so the standard practice is to round off prices to the nearest full credit.

The standard identification package incorporates a personal credit card. The face has a thumbscan/DNA sampler sensor on one end and a touchscreen display that covers the remainder of the face. A hardcopy of the owner's personal information and a holographic photograph are embedded on the opposite side.

Stock Exchanges: Not surprisingly, the largest stock exchange in the solar system is located in the Jovian Confederation. The combination of being rich in resources and having a strong industrial infrastructure means that a lot of business is done there by both local and international companies. Orbital stock exchanges deal heavily in technology companies, while Venus is home to a large venture capital exchange.

Commodity Exchanges: Brokers that buy and sell commodity contracts are seeking to obtain resources for the lowest price, or to obtain the highest price for their resource. The purchase of the right contract at the right time by a shrewd broker can save a company millions. One can also generate a large profit by buying contracts low and selling them high. The Mercurian Merchant Guild maintains the largest overall commodity exchange in the solar system within the Mercurian capital, Helios Station, though the best one for resources is located in the Jovian state of Olympus. In addition to its large mining operations, the asteroid Vesta hosts commodity exchange that deals exclusively with independent prospector contracts.

▼ BARTER

Nomads have little use for money. The precious metal deposits a Clan can extract over the course of a month are more than enough to make an average person wealthy for life anywhere else in the solar system. Even if a Clan has a great deal of money, the things it needs — water, food, functioning machinery — are not always available for sale. However, they may be available for trade.

Bartering depends entirely on perceived value and involves a lot of bluffing, with each person trying to determine the needs of the other without revealing their own. The value of a particular item is set depending on how well this bluffing goes. No amount of haggling will convince a trader to lower a price if he knows what the customer can afford and is willing to pay.

Deals are usually concluded with a handshake, and items are exchanged immediately. If the merchandise is too large, or, as in the case of brokers, not immediately available a later date can be arranged for the swap. No items will be exchanged until that time. Bartering in bad faith or deliberately misrepresenting the quality of an item is considered a grave social offense to a Nomad. Such transgressions are usually brought before a Zocalo Council.

▼ MANUFACTURING

Automated factories, or autofacs, are responsible for the majority of manufacturing output in the solar system. While many of the other processes for supporting life outside the Earth's atmosphere require regular or constant human supervision, autofacs work in an almost completely autonomous fashion. The majority of human involvement involves the setup of the autofac and the movement of raw materials and finished products to and from the autofac. Technicians will occasionally perform maintenance and equipment upgrades, but there is little else to do other than check what might be wrong if the autofac's systems report a problem.

The production lines of an autofac are modular by nature, but the cost of setup, or changeover to a new product, means that only products destined for long term production, or requiring special production methods, are manufactured in autofacs. Everything else is produced by traditional automated production, assembly line and hand-assembly methods. Some of the production line tools in an autofac are large and complex enough that they will never be moved, and will only be shut down for heavy maintenance.

Each autofac has a raw materials delivery dock on one end, and a finished-products dock at the other end. Since there is no permanent human presence on an autofac, they operate at zero gravity conditions at all times. This also makes possible the installation of large access doors to move production line equipment into and out during setup, heavy maintenance or upgrades. Production lines within the autofac may or may not be self-contained to a single item. In many cases, the lines intersect each other to bring together the constituent parts for final assembly. In the case of autofacs used for processing resources, separate processes are located in different lines that split from a single, common materials feed.

Colony Cylinder: Colony cylinder construction begins at one end of the structure, usually with the stationary (low gravity) docks. The main structural skeleton of the cylinder is the first thing to be assembled. As it progresses, a follow-up crew begins to install the machinery located between the loadbearing members. Following this, the outer layers of the cylinder's skin are applied, and interior foundation decking and shielding is installed. Before the far end is capped, thousands of containers, along with reservoirs of liquid gases are stored within to finish the interior. It is common practice to install the raised monorail pathways as the cylinder skin is installed: this is the first fully functional component, being used to move work crews and materials around the area. Thermal radiators, communication arrays and life boats are also installed on the surface of the cylinder as the exterior surface is completed.

Spaceships: A typical shipyard is located near the autofacs that produce the ship components. Open-framework shipyards are simply structures to support the major components of the ship being built, such as the ship's keel, engines and gravity wheels. Pressurized shipyards assemble smaller ships and modular sections for larger ships: components and finished ships are brought out through large airlocks. Not all shipyards are large, immobile facilities: ships like the Jovian Armed Forces' Gagarin-class fleet tender and the CEGA Navy's Detroit-class fleet support ship are capable of handling these repairs in the field.

Space Stations: Space stations are small compared to the enormity of a colony cylinder. Most stations are modular in design to allow sections to be built at a central shipyard before being moved to their final location. Before the station is moved to its final assembly point, the sections are disassembled and filled with supplies, equipment and furnishings to finish the interior outfitting on-site.

▼ RESOURCE COLLECTION

Prospecting is a mainstay of the Nomad economy. Almost every Clan needs prospectors, but not everyone has the money it takes to start and maintain a prospecting operation. Some people, typically non-Nomad homesteaders and Nomad Clans down on their luck, try to make ends meet by just mapping and surveying new deposits and selling these claims to others.

Whenever a Clan discovers a rich deposit of ore, the first thing it does is to post a time-stamped personal beacon on the rock. These beacons, called claim markers, are small radio broadcasters, preprogrammed by the Clan to identify itself as the claimant of the deposit in question. These markers are respected by any other Nomad stumbling across them within two months of first being planted. The Nomads assume that if a prospector has not started working his claim within two months, he is either a speculator (and consequently hated), over-claiming (i.e., biting off more than he can chew) or dead. When a Clan posts its

beacon it also updates its astronomical maps to include its new claim. Whenever it meets another Clan, they exchange maps and thereby "register" each other's claims. If a Nomad ship encounters another Clan's claims beacon, it updates its maps to include that other Clan's claim. The Nomads will also honor claims by non-Nomads, providing that the claim beacon is time stamped in a Nomad fashion. Any non-Nomad prospector wanting to live a long and uneventful life learns very quickly to respect Nomad claims markers.

Venusian corporations have been moving large-scale mining operations into the Belt of late, and have been stepping on a lot of Nomad toes. They blatantly ignore any traditional Clan claim and will only respect claims staked through the central registry on Ceres. The Clans are also getting increasingly annoyed at the Venusians for speculating, staking out huge chunks of space and then attacking Nomad ships when they try to mine the rocks after the claim has expired.

◇ MINING

Nomads are not the only miners in the Belt. Companies from Venus, Mars and the Jovian Confederacy can be found practically everywhere. There is a wide variety of extraction and refinement methods. The most common involves reducing asteroid rock to a powder, where metals can be magnetically separated from the rest of the debris. The non-metallic leftovers are put into ovens, where volatile materials are literally baked out and condensed into collection tanks. The process is highly automated, since mining environments pose a significant hazard to human workers. Heavily armored vacuum suits and exo-suits are used, but even so, miners do not like to enter active excavation sites unless they must.

Massdrivers are also in use by various concerns around the Belt. Ore "shots" are launched from the excavation or processing site and are retrieved at their destinations by masscatchers. These shots are massive and unmanned. Both mass drivers and slings are cheaper than freighters, but both suffer from a major drawback: should a mass catcher miss a shot, there is usually no second chance at retrieval. Companies who desperately need a missed shot can chase after it; otherwise, they must wait a few years until it circles back around.

▶ LAW

The close confines of the early space settlements soon forced the colonists to design ways to deal with troublemakers rapidly and efficiently. Unlike the cities of old Earth, a station offered a poor environment for concealed crime: most people knew one another, and it was impossible to use the fruits of criminal activities without being recognized by all.

Each settlement and station has its own legal code and maintains its own police force. While most patrol officers are equipped with non lethal weapons such as tasers and tranq guns, SWAT teams are heavily armed with military-issue automatic weapons. The larger stations sometimes have emergency teams trained to use customized combat exo-suits to quell incidents involving rogue heavy machinery or exo-vehicles.

The legal system remains centered on a human judge who presides over the trial, where the suspect is represented by a defending lawyer (self-chosen or assigned) and prosecuted by a government-appointed individual. Juries are employed only on Earth and occasionally on Venus, Mars and the Jovian Confederation; most citizens do not have time to spare from their duties.

Most colonies have at least one rehabilitation center, where serious offenders are incarcerated; daily therapy sessions are combined with forced-attendance re-education classes. Nations either kill their undesirable citizens (like the Martian Federation) or set them free at the drop of a hat (a common barb directed at the Martian Free Republic). Some space settlements offer criminals the option of exile rather than face rehabilitation, imprisonment or even death.

Mercury: Trade-related activities are the major source of revenue for the tiny Mercurian state, so it is no wonder that tax and trade codes make up a sizable portion of its laws. Mercury is well-known for its extremely restrictive and severe non-disclosure agreements and other intellectual property laws, which rival only the Venusians' in completeness. There are few crimes that outrage Mercury's citizens more than commercial espionage. Mercurians must by necessity spend a great deal of time close to one another, and privacy laws are very complete. They also frown upon unnecessary risks, and involuntary homicide charges carry almost as great a penalty as intentional murder.

Venus: Venus is a settlement that is cloaked in conflict and power. As a result, laws have been put in place to seemingly facilitate intrigue. The court system is just another arena to establish dominance over one another. Murder and blackmail are both dealt with harshly; that doesn't mean they aren't used by ambitious social climbers, merely that practitioners must cover their tracks a little more thoroughly.

Earth: Earth, as it has ever been, is fragmented. CEGA rules the Earth and its surroundings, but some nations in the Middle East, Africa and Asia all maintain independence. This has created a mosaic of legal codes and a nightmare for the law enforcement officer who has to track his quarry across several frontiers. The average CEGA citizen is generally poor, and bribes often form an important part of their revenue. Most criminal offenses, unless they have been committed against CEGA personnel, can generally be "forgotten" with a gift to the proper person.

The Moon: The culture that developed among the Moon's settlers emphasizes discipline and hard work. Public loud and boisterous behavior is a social taboo and carries stiff penalties. Bringing grief or harm to another by failing to perform one's duties is treated as a crime and dealt with accordingly.

Mars: Martians value their personal space, and consider kidnapping and other unwilling confinement to be extremely grave offenses. Republican citizens have the constitutional right to bear arms without a permit, and almost all take advantage of it. The people often take the law into their own hands — if there are sufficient witnesses to testify in favor of the accused, charges of murder are rarely (if ever) applied. The legal system of the Federation is nearly the complete opposite. There are frequent identity checks and the weight of numerous rules of conduct is crushing. Federate citizens do not have the right to bear arms.

▼ SPACE LAW

Though the laws of physics ensure that all space-based societies share some basic rules and customs based on survival in space, they have nonetheless evolved into distinct cultures that are as vibrant and vivid as any civilization on Old Earth. Each has its own set of values and taboos, and has evolved a set of laws which takes them into account.

Orbital Settlements: The Orbitals have a sheltered way of life, and their laws reflect this. People who cause social disturbances are quickly removed and often shamed into atonement. Repeat offenders will likely find themselves with a one-way ticket to Earth. Like all space-based societies, the Orbitals take emergency procedures very seriously. To endanger life or otherwise cause harm by breaking these rules (stealing an emergency space suit from a safety locker, for example) is seen as a grave offense.

Jupiter: The court system of the Jovian Confederation has been expressly designed to ensure swift and just punishment for criminals. Citizens are encouraged to work out differences between themselves for minor offenses, since there are penalties built into the law for those who engage in frivolous pursuits (as determined by the courts). Jovian society has been built by free thinkers: anyone who would violate the freedom of others is in dire trouble. Crimes such as murder send the perpetrator to a reeducation center for the rest of his life. The speed of the court system means that mistakes sometime happen.

Nomads: Nomad Clans don't exactly have a homogenous culture, but they share similar characteristics. The small size of most communities has led to an informal "town council" type of justice, where all members of the group decide upon the punishment of the guilty. Nomads are very serious about their duties and safety, and they despise laziness. Those who fail to properly learn the lessons soon find themselves in serious trouble: there are no "involuntary" infractions among Nomads.

▼ THE EDICTS

During the chaotic years of the second half of the twenty-first century, many nations devoted ever-increasing amounts of money and resources to scientific research, especially in new fields of study. Speed and results were the two keywords, and authorities didn't much care how the work progressed as long as it did. Security precautions were vague, sometimes non-existent, and casualties were always high. The consequences were terrible: plagues, atrocities and implements of mass destruction were created and unleashed. Fortunately for the future of Mankind, most of these dangerous experiments were carried out in remote locations on Earth or in isolated orbital laboratories and workshops.

The result was the Edicts, a covenant written into the codes and laws of every place of learning in every nation in the solar system. Though they are disliked and even hated by many in the scientific community, all agree (even if reluctantly) that some form of control is necessary for the safety of all. The Edicts prohibit all access to high-level information pertaining to bioengineering, high energy physics and nanotechnology, and likewise forbid research into these areas without specific government approval and constant public scrutiny. The Edicts also apply to research into artificial intelligence; creating new self-aware life would be even more potentially devastating to humanity.

Offenders receive the most severe punishments possible, ranging from the loss of prestige and research privileges to imprisonment or even death, if the offense is grievous enough. These restrictions and penalties are intentionally harsh; a single accident may have the potential to kill billions, and no one is taking any chances given the odds.

Pockets of facilities flouting the Edicts flourish in different areas of the solar system. Although every nation maintains several illegal research facilities, these are always heavily safeguarded, and most feature safety procedures that are above and beyond anything that the Edicts require. Even so, one of the Solar Police's major efforts goes towards keeping an eye on such installations.

▼ BLACK MARKET

The black market is a term for irregular trade avenues that deal in all sorts of goods from simply unavailable or scarce commercial items to illegal weaponry and technologies. Items that can be legally bought and sold in the open, but that are much scarcer in an area (or were stolen) are the most common items available from pawn shops or the friend of a friend of a friend in an alleyway somewhere. The sale of such items is not always illegal, but the prices paid for such items range anywhere from 50% to 500% of the normal selling price. Anything that is illegal to own or sell without a permit is likely available on the black market; one just has to find the right person.

Anyone involved with buying and selling on the black market is patently paranoid about law enforcement officers. Anything less means a short business life as the police or SolaPol quickly swoop in to haul the offender off to be subjected to varying degrees of punishment, depending on the nature of the materials bought or sold. With the tensions between the superpowers of the solar system, the black market is awash with illegal weapons of all sorts as arms shipments and other items go missing. This has led to increased efforts by SolaPol and other agencies to stifle the flow of illegal goods to black markets.

▼ PIRACY

People who cannot peacefully abide within the legal strictures are swiftly and mercilessly cut off from society. Removal of the offender from the public eye takes many forms; these range from the rehabilitation clinics of Jupiter to the firing squads of the Martian Federation. In the modern solar system, the only place for such outcasts to run and hide is in the vastness of space. To survive, they turn to piracy, preying upon unarmed spacecraft.

5

KANSAS CITY SCARE

The Kansas City Scare of 2037 was one of the events that would eventually lead to the Edicts. Although there were few victims, the potential for disaster was so staggering that regulations were put into place virtually overnight. A small engineering lab on the outskirts of Kansas City was working with a batch of new Yamashita material processing microrobots that had just been shipped over from Japan. During an all night run, most of the batch was accidentally destroyed. The lab's manager decided to reprogram the remaining bots to build copies of themselves rather than order a new batch and blow his budget.

Three weeks later, replicated microbots turned up in five different locations around the neighborhood. Civil authorities closed the city limits to avoid additional contamination. Panicked rioters descended in the street, facing soldiers determined not to let anyone "infected" through the barricades. The riot lasted for two full weeks, until it was discovered that the microbots were degenerating with each "generation." They had never been designed for self-reproduction, and the entire disaster ground to a halt by itself.

Pirate culture is impossible to categorize; any given pirate is where he is for a unique set of reasons. Some are brutal and trigger-happy, others are motivated by pure profit, but most are merely trying to eke out a living on the fringes of a society they find distasteful. Most pirates are sympathetic to others of their kind. Although some rivalries naturally exist, meetings between pirate groups usually resemble family reunions.

No central organization exists among pirate groups largely because they are scattered across the solar system, operating from hidden bases. Most pirate groups have only one or two ships equipped with outdated weaponry, although some mercenary groups in the employ of Earth or Venus have received some very advanced technology.

The pirates' targets are most often slow and unarmed merchant vessels, from which they steal needed supplies and equipment. Such activities are not considered a major threat by any government, and "piracy expenses" have become a common sight on Merchant Guild ledgers. Occasionally, however, a particularly brutal or greedy pirate group will kill a crew and steal the entire ship. In these cases, punitive military expeditions are mounted to "discipline" the offending group.

Nomad privateers choose their targets with care, attacking only automated transports or freighters will small crews. Typically, the pirate vessel will fire a warning shot, then order the vessel to "heave to" and prepare to be boarded. Unless the pirates are particularly ruthless or desperate, they will not struggle with armed ships or crews but rather break off the engagement and go in search of safer prey. Automated ships are usually stolen as a whole. The vessel is stripped down before it is sold, and any markings and black boxes are completely erased or removed.

Some feuding Nomad Clans have disguised themselves as pirates in order to conceal violent activities. The acquired goods are disposed of by trading them away at smaller zocalos. Nomads generally do not question the sources of zocalo goods, especially if those goods are high quality. If there is the chance of being caught, pirates may resort to using the gray market (as follows).

Piracy is regarded as a serious offence by all Solar nations. Punishment almost invariably includes a prison sentence of up to fifteen years. Injuries or deaths resulting from piracy are treated as separate crimes. Despite this, Nomads do not carry out the more violent acts of piracy. CEGA and, to a lesser extent, the Jovian Armed Forces actively target transports of each other's government. Both employ heavily armed merchantmen in an attempt to disrupt their adversary's shipping within the Belt. It is impossible to tell a "commerce raider," as they are known, from a standard pirate vessel except for the fact that instead of retreating from warning shots, a commerce raider will return fire.

▼ SMUGGLING

In Nomad society, most trading is done openly, although certain items, such as weapons, tend to be sold quietly. The real black market lives out at the trade stations, where nefarious characters from all over the solar system gather to purchase items

otherwise restricted back home. Smuggling is done predominantly into, out of or across the Belt: the majority is aimed towards the inner solar system, particularly Earth, the orbital colonies and especially Mars. There is no need to smuggle from point to point within the Belt, as the region is outside the jurisdiction of all major system powers.

SolaPol classifies smuggling as an offence at two levels. Transporting contraband of less than a thousand credits brings minor fines or community service, as well as up to six years of probation. Most law enforcement agencies consider this sort of low-level smuggling to be a nuisance crime, and records of this infraction rarely stay on a criminal record. Transportation of contraband over a thousand credits (but not violating the Edicts) is a serious offense. Punishment includes huge fines and up to six years' imprisonment. There is also a permanent record of the offense. Infractions of this level require SolaPol involvement.

The gray market consists entirely of fences and contacts. Fences buy stolen goods directly, store them for a time and then make them available on the open market. Contacts are information gatherers, people who "know people" and can make introductions. Goods presented for trade at zocalos are treated with respect to quality, not source. Once traded, pirated goods vanish into the depths of the Belt along with their new owners. Only truly stupid smugglers and pirates operate openly on trade stations. There are too many opportunities to fall headlong into a sting operation run by SolaPol or some national intelligence agency.

Reputation counts just as much between smugglers, pirates, contacts and fences as it does between other Nomads. Those who prove to be untrustworhty have a tendency to "disappear."

It is not unknown for entire Clans to function as fences for the gray market. Gray market Clans are usually more successful than individual fences as the Clans have larger resource pools and greater transportation potential.

UNDER THE TABLE OR NOT IN THIS HOUSE

Most zocalo trade is done freely and openly. There is little point in establishing a black market in a society that does not presume to ask a great deal of questions about merchandise. On the other hand, there are some items that Nomads prefer to trade quietly and a few that they will not trade at all. Armaments fall under the "trade quietly" category, especially if weapons are being sought in large quantities. The reasons for such a purchase may be entirely valid, but Clans become apprehensive if they notice one of their neighbors collecting an arsenal. Nomads will not usually deal in weapons of mass destruction: nuclear, biological or chemical. Radioactive materials are generally not made available to those the Nomads don't trust. Nomads also avoid dealing with indiscriminant weapons such as mines or explosives. Finally, they do not tolerate the use or sale of recreational narcotics. This doesn't preclude alcohol, although drinking is restricted to designated "safe" areas, such as bars and pubs.

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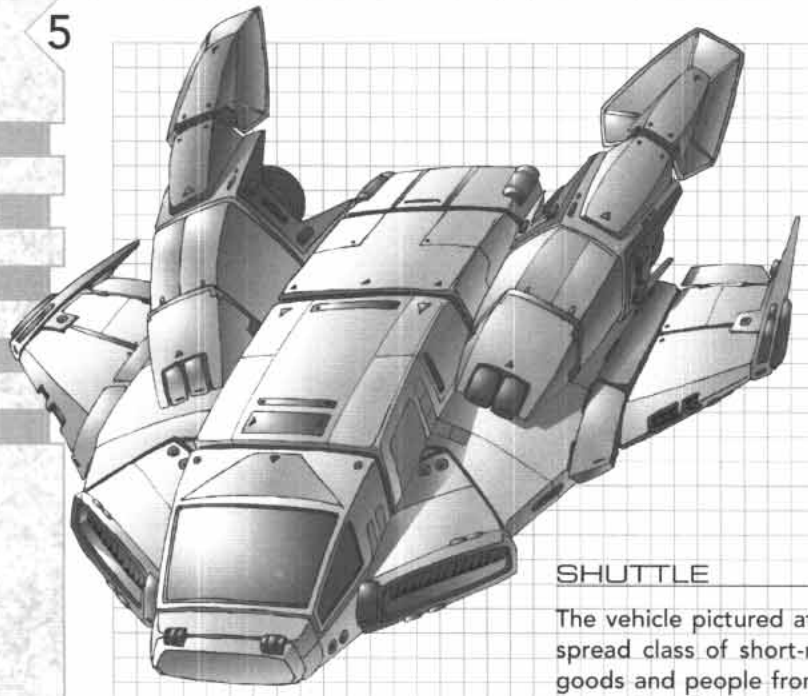
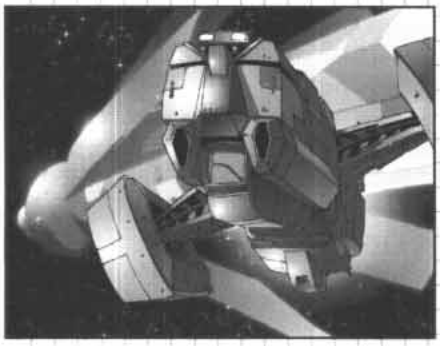


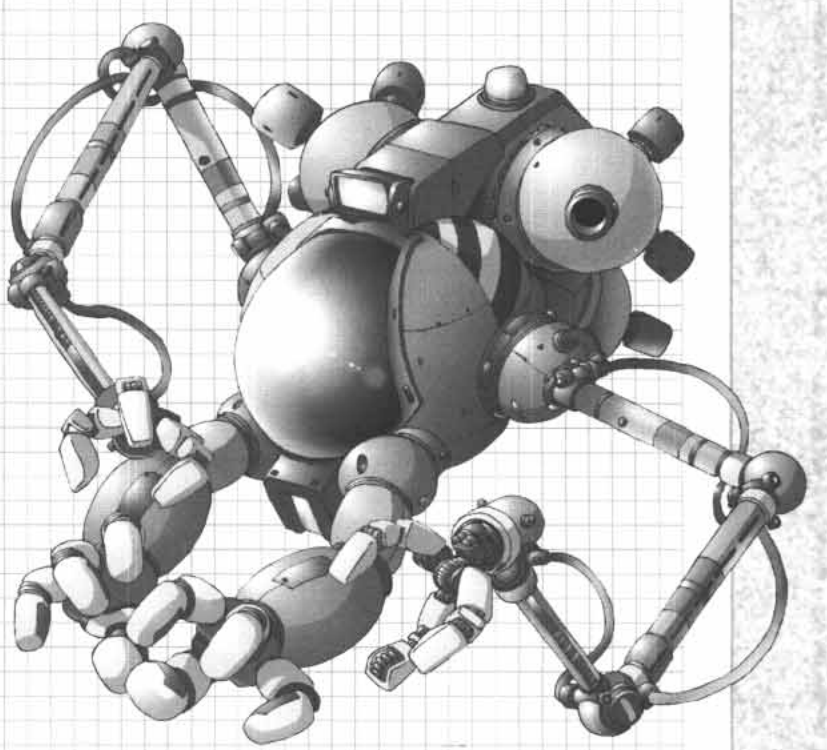
SHUTTLE

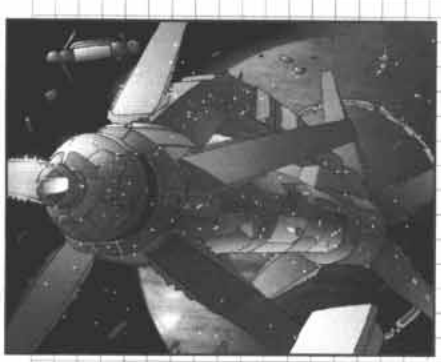
The vehicle pictured at left is representative of a widespread class of short-ranged spacecraft used to move goods and people from the surface of a planet up into space. The lifting body design includes two or more fusion engines that use air during the first part of the ascent, thus saving on reaction mass. Most of the fuselage is taken up by a cargo bay.

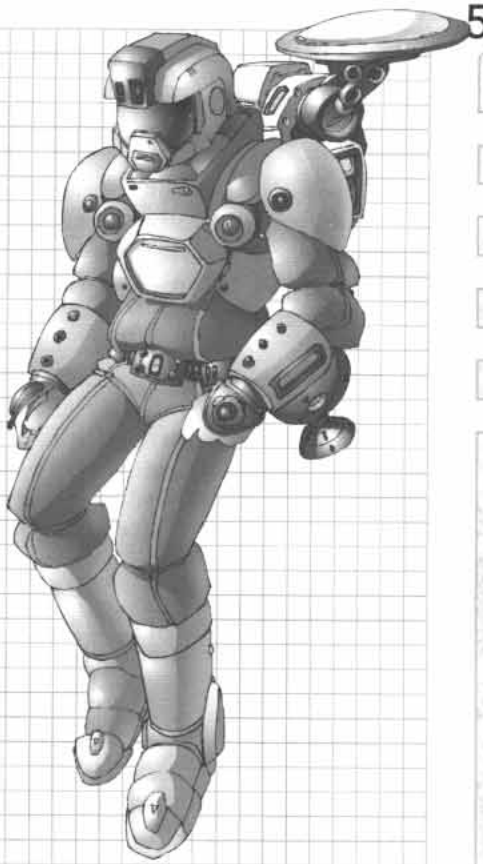
M-POD

The small spacecraft shown at left is a Maintenance Pod, better known as a M-Pod. As its name explains, it's a one-man vehicle designed for upkeep and construction on space projects. M-Pods can be found on every space stations, and most spaceships will carry at least one.



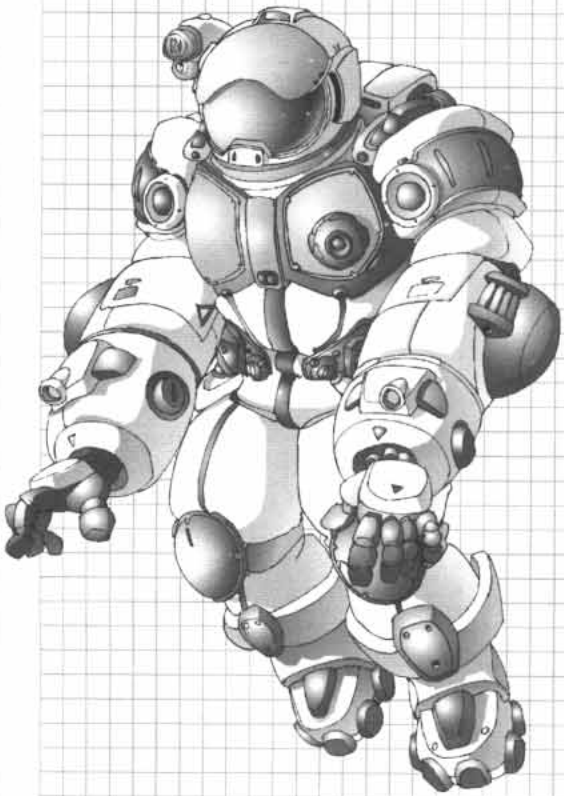






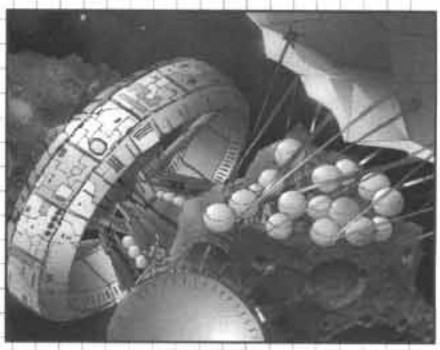
SOFT SUIT

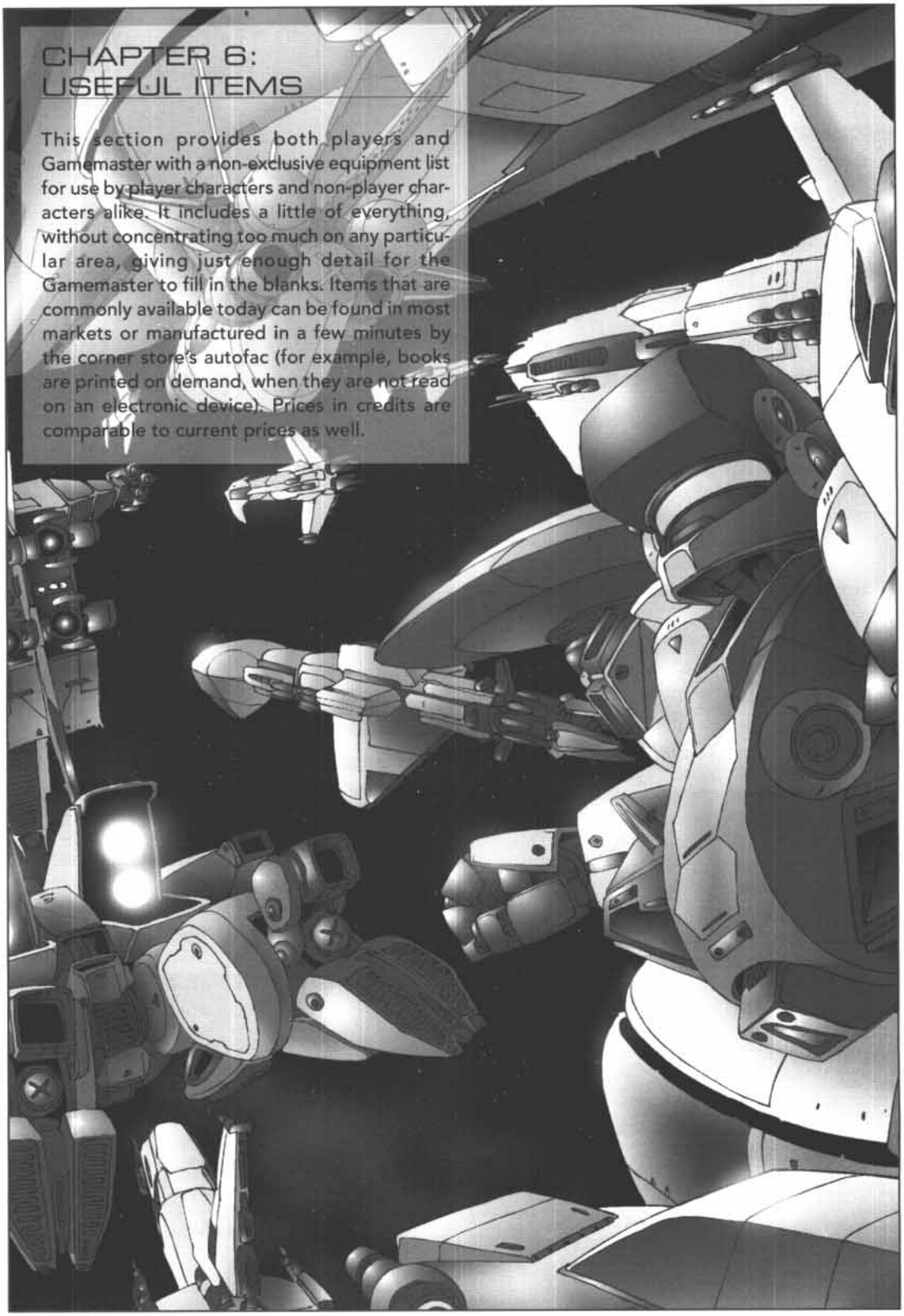
The spacesuit pictured at right is one of the "soft" variety, being made of pliable layered fabrics. This particular suit is equipped with additional sensors and thrusters on its mission pack; the controls are located on the back of the suit's gloves. The helmet incorporates both camera and a heads-up display.



HARD SUIT

The spacesuit pictured at left is made of interlocking segments covered in a tough armored fabric. It's quite similar to the early spacesuits of the late 20th century, but offers much more protection, endurance and comfort for a fraction of the required maintenance. This one is equipped with pseudo-hand attachments, armored boots and extra headlights.





CHAPTER 6: USEFUL ITEMS

This section provides both players and Gamemaster with a non-exclusive equipment list for use by player characters and non-player characters alike. It includes a little of everything, without concentrating too much on any particular area, giving just enough detail for the Gamemaster to fill in the blanks. Items that are commonly available today can be found in most markets or manufactured in a few minutes by the corner store's autofac (for example, books are printed on demand, when they are not read on an electronic device). Prices in credits are comparable to current prices as well.

▶ COST OF LIVING

Confirming Benjamin Franklin's words 'In this world, nothing is certain but death and taxes' all solar system governments still tax their citizens. A guideline for the different taxation rates among nations is presented below. Additionally, player characters need to shoulder the basic cost of living no matter where they go.

AVERAGE TAXATION RATES

Nation	Rate*	Nation	Rate*	Nation	Rate*
Mercury	10%	Venus	12%	Earth	35%
Orbitals	30%	Moon	25%	Mars Rep.	5%
Mars Fed.	50%	Jupiter	15%	Saturn	6%

* Percentage of annual income. Rates will vary by +/- 5 to 10% depending on income level and special cases.

▼ LIVING QUARTERS

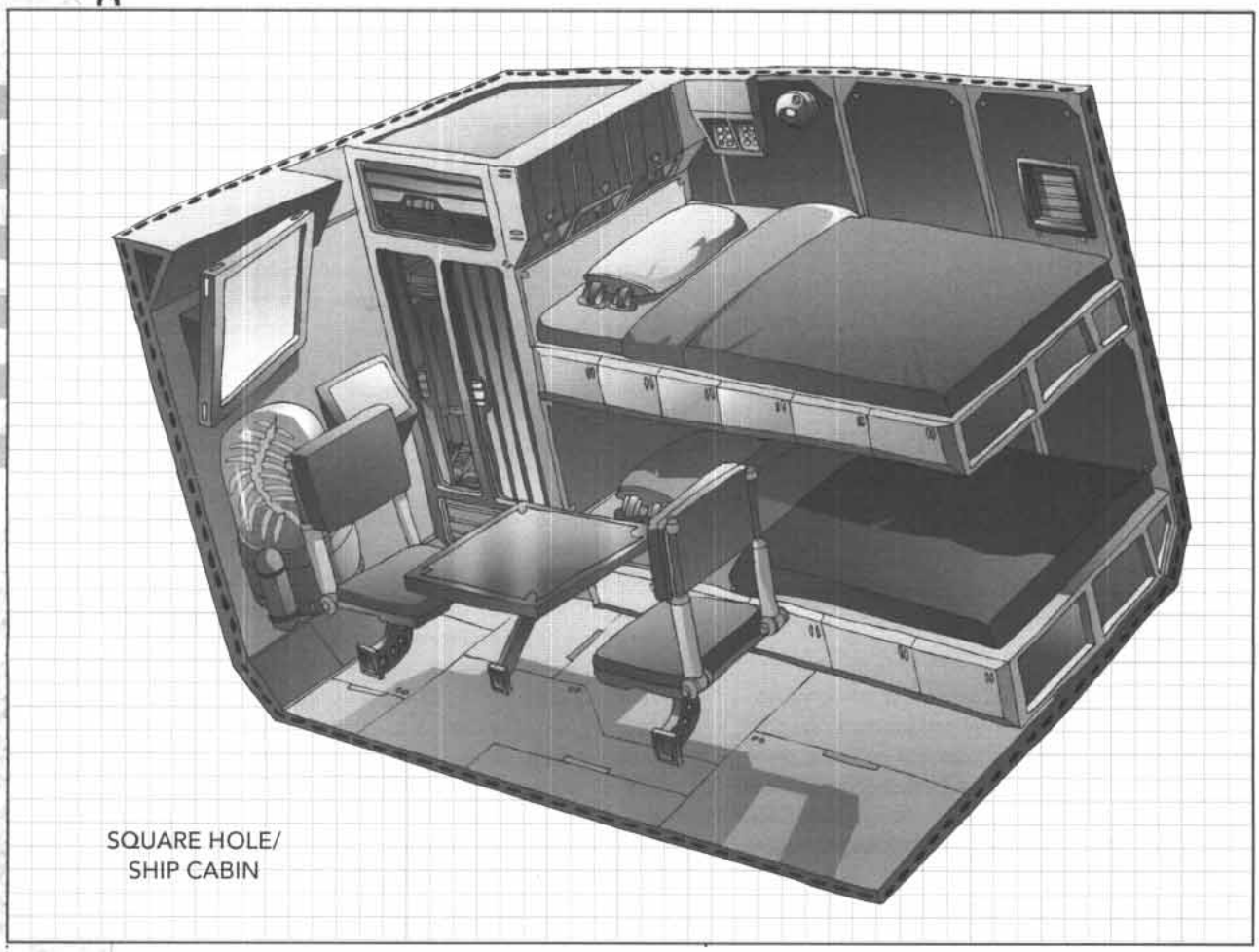
Most locations in the Solar system have only a limited amount of space for living quarters. As a result, the design and arrangement of living quarters has become quite standardized, regardless of location. Normally, quarters don't have food preparation or personal hygiene facilities attached, as these are grouped into common rooms. Most living quarters are only available for a monthly rental rate. They are always spaced out so as to centralize access to resources.

Minimal quarters: Minimal quarters are available in two flavors, "coffin rooms" and "square holes." Coffin rooms, also know as sleeping tubes, are cylinders one meter in diameter and two and a half meters long. The far end of the tube holds small storage cabinet. They are rented on a monthly basis for 200 to 300 credits. Square holes, more properly known as box quarters, have airlock-like entrances and measure 1.5 meter wide by three meters deep on average. These quarters may accommodate two people and are suitable for long-term habitation for those with a lower income. They are rented for 300 to 400 credits a month.

Basic Quarters: These are available for both single and double occupancy. Single basic quarters are twice the size of square holes, while double basic quarters are four times that size. Emphasis is placed on functionality and no storage area is left unused. Environmental and aesthetic parameters are fluid and left to the occupant's discretion. Monthly rent for single-occupancy quarters is 600 to 800 credits, while double-occupancy quarters rent for 900 to 1200 credits. Options such as a window to the exterior or extra storage space are not included. It is possible to expand one's quarters following the prices listed below.

LIVING QUARTERS EXPANSION OPTIONS

Additional Area	Adds	Size	Cost/Month
Bathroom I	toilet, sink	1 meter by 1 meter	200 credits
Bathroom II	toilet, sink, shower	1 meter by 2 meters	500 credits
Bathroom III	toilet, sink, bathtub w/shower	2 meters by 2 meters	1200 credits
Kitchen I	small-size fridge, two-element stove, cupboards	1 meter by 2 meters	350 credits
Kitchen II	average-size fridge, four element stove and oven, cupboards	2 meters by 2 meters	800 credits
Dining Area I	4-person seating	2 meters by 2 meters	450 credits
Dining Area II	8-person seating	3 meters by 3 meters	800 credits
"Living Room" I	two love seats, video wall screen	2 meters by 3 meters	600 credits
"Living Room" II	two couches, video wall screen	3 meters by 3 meters	900 credits
Extra Bedroom I	single bed	1.5 meters by 2 meters	400 credits
Extra Bedroom II	double bed	2 meters by 2 meters	500 credits
Entranceway	extra space at quarter's entrance	1 meter by 1.5 meters	300 credits
Storage Area	closet-type area	1 meter by 1 meter	200 credits
Private Study	desk w/terminal, chair, video wall screen, shelves	2 meters by 2 meters	750 credits



SQUARE HOLE/
SHIP CABIN

Wealthy Quarters are for those who have money, and there is no restrictions to what credits can buy. One of the greatest distinctions between wealthy quarters and lower class ones is the decoration: floors are covered in carpet, hardwood or tile. The walls have a textured finish while rugs and tapestries are commonly added to rooms. Moldings and trimming are done in real (expensive) wood or stone. Numerous windows provide a view of space and these types of quarters are cathedral-like in comparison to basic living spaces. Furniture is free-standing in wealthy quarters; storable beds and folding tables are replaced by proper couches, desks, potted plants and spacious beds. Kitchens and bathrooms are two more standard amenities. Given the widely varying nature of these quarters, and the fact that most are purpose built, they are not available for rent. The purchase price for a wealthy quarter ranges from 1,000,000 to 4,000,000 credits with an annual property tax by the local government.

▼ FOOD

The meals available in space are highly nutritious and well balanced: everything is made with specially produced and processed ingredients. Meals come from high-density aquaculture and high-yield crops, both of which are grown in special agriculture modules and greenhouses outside the main living area of the colony or settlement. These modules receive high amount of sunlight and are kept under high CO_2 content, producing crops many times per year. Specialty food and delicacies such as spices are grown in hydroponics or private gardens.

Naturally produced and prepared foods are only available in restaurants, and are considered a delicacy. A typical restaurant meal includes meat and seafood and will cost ten times the pre-packaged equivalent. Many say that the best chefs are found on Venus and Mars.

UNIQUE TASTES

One would not think of Mars as the premier producer of fine wine in the solar system. Genetic manipulation has adapted Earth grapevines to Martian conditions, however. The independent wineries of Mars reproduce many of the great vintages of past, in addition to new wines unique to the red planet — like the Martian Red, Green and Blue. These can have virtually any combination of qualities and flavors.

The former wine-producing areas of the Kingdom of France are either engaged in sustenance agriculture or environmental recovery projects. The small quantity of French wine is reserved for consumption by the nobility.

Contrary to popular beliefs on Earth, vegetation is ubiquitous in space. Plants are prized by spacers and gardeners likened to artists. The roofs of many colony cylinder buildings are flat and covered in soil or hydroponics gardens. Underground settlements on the Moon and Mercury use potted plants — again, fruits and vegetables — to brighten the surroundings. If the plant is located in a public area, it is considered extremely rude to take a sample unless first offered a taste by the owner or caretaker.

▼CLOTHING

Choosing clothing is a tradeoff between aesthetics and functionality. The most common fabric is a derivative of spider webbing manufactured from carbonic rocks. Only Earth produces natural fibers, and most of it remains there. Spacers avoid wearing loose or baggy clothes, as these have a tendency to catch on edges and cause accidents. Outside the Jovian Confederation, it is only on occasions of great celebration that this unwritten rule of fashion is ignored.

CLOTHING

Item	Cost
Work Coverall	75 cr
Casual Pants	30-80 cr
Fire-Retardant Coverall	125 cr
Casual Shirt	20-50 cr
Business Suit	200-400 cr
Evening Gown	200-800 cr
Casual Business Clothes	100-200 cr
Tuxedo	400 cr, rental 30 cr/day
Casual Coverall	50-100 cr
Fashionable Clothing	500-2500 cr

FOOD AND DRINK

Processed Foods	Cost	Fresh Foods	Cost	Unique Tastes	Cost
Soy burger	3 cr	Fresh fruit	10 cr	Mars Classic Earth Wines	50-300 cr
Bottled water (1L)	1 cr	Fruit drink (1L)	5-10 cr	Mars Red Wine	20-60 cr
Packaged breakfast	4-6 cr	Dairy milk (1L)	15 cr	Mars Green Wine	40-120 cr
Packaged lunch	7-10 cr	Seafood meal	25-120 cr	Mars Blue Wine	75-200 cr
Package dinner	9-12 cr	Steak meal	30-150 cr	Small potted plant	30 cr
Energy bar	1 cr	Honey (100ml)	50 cr	Medium potted plant	100 cr
Soy milk	2 cr	Spices (50 grams)	15 cr	Large potted plant	250 cr
Note: fresh foods are often less expensive on planets and farming-oriented colonies, and more expensive in isolated areas.					

MILITARY UNIFORM COLORS

Nation	Duty Uniform	Dress Uniform
Jovian	White and gray with yellow piping	White long jacket with gold piping
CEGA	Light olive	Black long coat with silver piping
Venusian	Charcoal	Gray & gold ceremonial armor, cape with corporate colors
Mercurian	Light blue	Dark blue jacket and pants with red piping
Mars Federation	Rust red with black mottle	Crimson jacket with gold piping, black pants
Mars Free Republic	Rust red with dark gray mottle with green spots	Dark green desert cloak with gold clasps and buckles

▶ SPACE SUITS IN THE 23RD CENTURY

The basics of space suit design remains unchanged after more than two hundred years of human space exploration. The primary function of a space suit is to protect the wearer against the hard vacuum and excessive temperatures of the space environment (which makes them different from a vacuum suit, which only guard against the lack of pressure). They also provide a convenient mounting frame for tools and survival equipment such as radiation shielding, rocket maneuver units and communication equipment.

What has changed are the manufacturing methods and materials that make modern space suits far superior to the primitive space suits of the 20th and 21st centuries. The biggest change is the universal use of a thin layer of self-sealing material capable of closing holes up to 0.5 cm wide in one round.

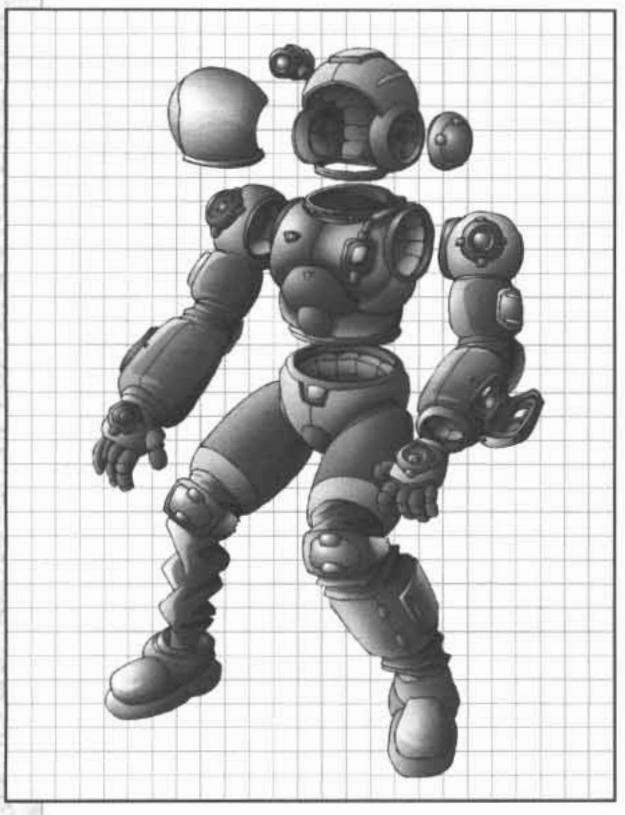
For the most part, space suits manufactured in different parts of the solar system will vary only in appearance and the placement of components. Suits function at the same five psi mixture of oxygen and nitrogen that all ships and habitats employ. Using standard atmosphere gases also eliminates pre-breathing; thus, a person can quickly put on a space suit in an emergency without worrying about decompression sickness.

Most space suits feature a thin myomer pseudo-muscular layer to help move the suit and counteract its air pressure and stiffening effects. The myomer is powered by the suit's internal power supply and by micro-generators in the joints that provide power when the wearer moves.

▼ WEARING A SUIT

A spacesuit is a miniature, form-fitting spaceship designed to keep its single occupant alive in the deadly conditions of outer space. It has to defend the fragile human body against extremes of temperature, vacuum and hard radiation. No matter how high tech the suit is, it cannot accomplish these tasks and yet feel like casual clothes. Wearing a suit is a tiring, bothersome affair. The joints restrict movements, the gloves remove tactile sensations (though some of the better gel-based "thin" models manage to transmit quite a few sensations) and the helmet always block at least a portion of the field of vision.

Depending on the Reality Distorsion Factor (see CORE rules, section 6.4.1) of the campaign, this can either be used for ambiance or simply ignored. In a high action, anime-inspired adventure, suits are like clothes: they can be put on within seconds, always work without being checked out, and can be worn for hours on end without discomfort. For a more "hard" science game, however, Gamemasters would be well-advised to read astronaut reports and learn about pressure-stiffened joints, suiting-up procedure checklists and fogging helmet faceplates. Either approach is entirely valid, and the two can even be mixed when the plot calls for it.



▼SPACE SUIT COMPONENTS

The space suit itself is several interlocking pieces: a helmet, torso, arms, gloves, legs, boots, and a mission pack. This modular fit allows the space suit to accommodate any body size or shape. For convenience, the arms and mission pack are left attached to the torso unless it is replaced with a new component. The same thing is done with the legs and boots. The gloves and helmet are left unattached since it makes getting into a space suit easier.

Controls: The suit control pads are mounted on the forearms of the suit. The control pads include communication controls, suit function and resource monitors, and connections to any additional equipment. This is all displayed on forearm video screen where access to menus and functions is possible via touch pad. Resource monitors alert the wearer to any suit malfunctions with both audio and visual cues (unless specifically turned off), and suggests an appropriate course of action. The suit is equipped with a radiation level monitor that displays warnings on the screen and activates a specific audio alarm that most spacers never fail to pay heed to.

Helmets: These contain the suit's radio, drawing power both from the mission pack and an internal backup. A communications jack is located next to the radio controls, on the side of the helmet, for hardline communications. In addition to polarized anti-glare visors, the helmet faceplate tint is electronically adjustable to reduce the light level. A light is mounted on the helmet, generally at the top center (some models have it on the side).

Mission Pack: The mission pack is a backpack that carries the air supply, power source and the essential cooling system for the suit (a human being generates lots of heat that can be redistributed). It's a compact, no-nonsense, feet-long box, bag or cylinder worn on the back or latched at the waist or upper tight. A mission pack normally offers between six and eight hours of autonomy to the wearer; depending on the type of suit worn and its manufacturer.

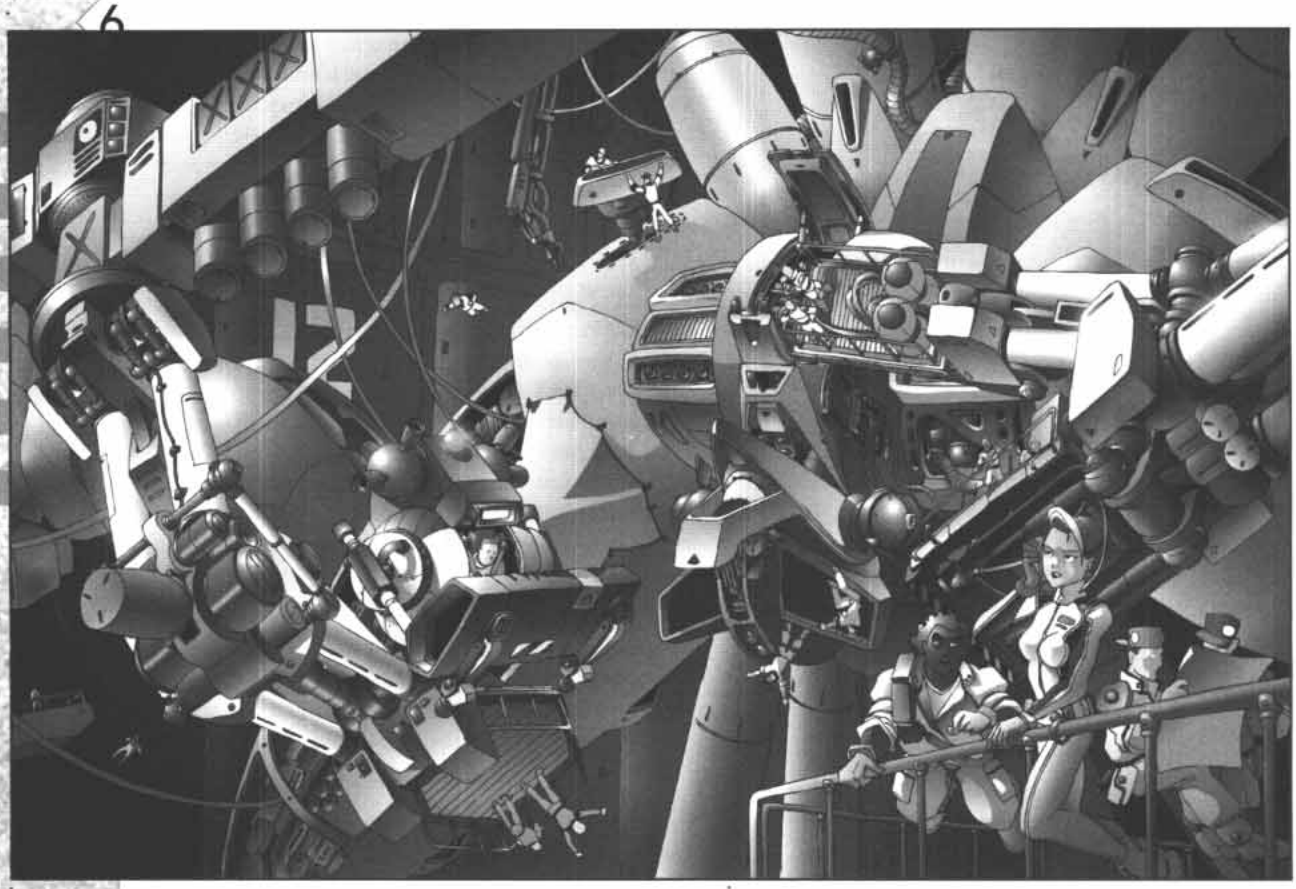
"Always inspect the mission packs of individuals apprehended in a spacesuit. Decoy mission packs have increasingly been used by fences to smuggle small items or by terrorist cells to hide explosives."

— Recent SolaPol communicate

Beacon: All space suits are equipped with a rescue locator beacon. It activates automatically for a number of emergency circumstances: oxygen depleted, power depleted, loss of pressure, and extreme fluctuations in temperature or radiation levels. Under these circumstances, the beacon can be overridden by the wearer, but it is assumed that the wearer will be unresponsive if any of these situations should happen. The wearer can also manually activate the beacon.

The beacon has a range of 1000 km but is very faint. There is enough power for two days of continued broadcasting.

Armor: Most space suits include some basic resistance to damage thanks to their tough fabric. They can also incorporate additional armor if need be. In game terms, treat them as if the character was wearing armor as well (see further in this chapter for an armor selection), with all costs, penalties and bonuses being cumulative. Armor must be designed into the space suit, it cannot be added on later or worn separately.



▼ REPAIR

Depending on the nature of the damage, a space suit may or may not be repairable. Any electronic or mechanical part is easily fixed by simply replacing the part. Any extensive damage to the suit structure or polymers is not considered repairable due to concerns about failure from faulty repairs. In this case, the damaged section must be replaced. Even suits with arms or boots integral to the torso or legs, respectively, have rotation or connector rings that allow the arm or boot to be replaced individually.

Ideally, the replacement parts should be from the same suit model. If it becomes necessary to replace space suit parts with parts from a different suit model, the Gamemaster should decide what effect the replacement parts will have on the repaired suit's operation. Effects may include limited mobility, decreased duration, an increased chance of component failure, or simply an annoyance, like a restricted visual range or uncomfortable fit. Replacing damaged components with the proper parts is a trivial task for anyone with a thorough knowledge of suit operations. ■

▼ MODIFICATIONS

Each space suit is listed with a number of expansion slots available (listed under the suit statistics as Expandibility). The slots represent how much room the suit has for accessories. Some items will simply replace existing suit equipment, while others will replace the existing system and require extra slots. Some items may also be attached externally without requiring a slot.

If the space suit is purchased with the modifications in place, the character doesn't have to worry about the quality of work. If the suit is retrofitted with a modification, a technician with the skill appropriate to the modification makes a Skill Test. If the test succeeds, everything works perfectly. If the test is failed or fumbled, there is the possibility that the suit suffers a failure under adverse conditions. A person trained in space suit operation can attach endurance upgrades and external reaction mass without incident.

▼ TYPES OF SPACE SUITS

Suits are generally divided into two classes: soft and hard. Space suits are considered soft suits if they are made with pliable materials and flexible polymers. Soft suits are the most common of all space suits: they include the basic (soft) worksuit, flight suits, crew suits, and Mars suits. Hard suits are designed for extremes. These space suits are made from hard polymers, composites and metals to resist the hardest use and harshest environments. They are commonly used in space construction, during exploration, by law enforcement personnel, and by the military. Hard suit types include the heavy worksuit, armored suit, and augmented suits.

Soft Worksuits are used inside stations and in low Earth orbit, where the magnetosphere offers greater radiation protection. They are also used on the lunar colonies for short duration excursions; longer excursions are made under a radiation screen pack. Soft worksuits are manufactured throughout the solar system by numerous companies. Each model will often have its own design peculiarities to try and distinguish it from a competitor's version. Some users are known to insist on using a single model only because of perceived differences in performance.

Crew Suits are soft worksuits with several modifications for use by ship crews. The first is the addition of a socket for plugging into the ship's life support and internal communication systems at crew stations. Each station has a connector cable located under a clearly marked cover. The end of the connection and the suit socket are shaped with the top half rounded and the bottom half square. This makes the connection easy and foolproof. The connection provides oxygen-nitrogen in/out, drinking water, power and communication hookups. High friction points on the suit are covered with duraplast mail patches to prevent wear and tear.

Military crew suits have even more duraplast mail as protection against shrapnel from combat damage. The Mercurian Apollo crew suit is considered to be the best available on the market. It is has less protection, but it is more comfortable and easy to use.

Pilot Suits are the least bulky of all space suits. This keeps the pilot's movements from being restricted in any way — an especially important trait for exo-armor pilots. These suits also have a crew connection socket that draws air and power from the onboard systems. This conserves the suit's air and power supplies for emergency use. A holographic HUD-equipped helmet (see *Accessories and Options*) is standard equipment for pilot suits; there is a socket at the base of the helmet for the HUD data feed.

Mars Suits are the lightest of the soft suits, and are designed exclusively for use on the Martian surface. The major suit component is a snug body suit that is impervious to ultraviolet radiation. The body suit contains heating elements since the average Martian surface temperature is still quite cold, especially at night. The enclosed helmet has the basic radio and light. Standard mission pack endurance is six hours, and it is very light compared to space suit packs. Most Mars suits are equipped with an air and power recharge port compatible with Mars surface vehicles. Mars suits used by the Martian militaries are covered in red camouflaged duraplast mail, have extended duration, and are equipped with military radios (see p.135). Mars suits are manufactured by numerous companies on the red planet.

Emergency Space Suits, or Evac suits, come packed down into a small polymer suitcase which is part of the suit itself. Interwoven, tear-resistant polymer threads from a tough outer layer. A second polymer layer lines the interior and forms the actual pressure vessel. The helmet is a bag with the forward half made of clear plastic. Special bladders and bellows allow the major joints to bend when the suit is inflated, though mobility is very limited.

A pressurized cylinder contains enough air for thirty minutes for an average adult. In order to fit as many body types as possible, the suit is simply a central body bag with tubes for the limbs. Arms end in mittens to avoid problems with hand sizes. An emergency patch, a can of dual spray and a tether line (see p. 132) complete the package.

This design allows the shortest possible suit-up time (a minimun of one round is always required). Due to the limitations of the suit, military and ship crew prefer to use conventional suits even during an emergency. Any physical activity suffers a penalty while wearing the suit. Emergency suits can be found in pull-out drawers, in beds, escape pods, elevators, and along hallways.

Rescue crews often refer to emergency space suits as "body bags", in reference to the state in which they often find space evacuees.

Stealth Space Suits: Nearly any space suit can be stealth equipped. Every military force, and some paramilitary groups like SolaPol and intelligence services, have some stealth space suits for use. The prohibitive cost of manufacturing and maintaining stealth suits means there are relative few examples possessed by any one group.

Stealth space suits cannot be modified with equipment other than was originally fitted (since this would lower the suit's effective stealthiness.) Because of the complexity of stealth space suits, a space suit cannot be retrofitted with stealth capabilities (See 'Stealth', p.166).

Hard Worksuits are the same as a soft worksuit, except for the addition of a tough "shell." Typical hard worksuits have a solid durashell torso, while the remainder of the suit is covered with duraplast mail. These worksuits are commonly used in space construction and for extended EVAs.

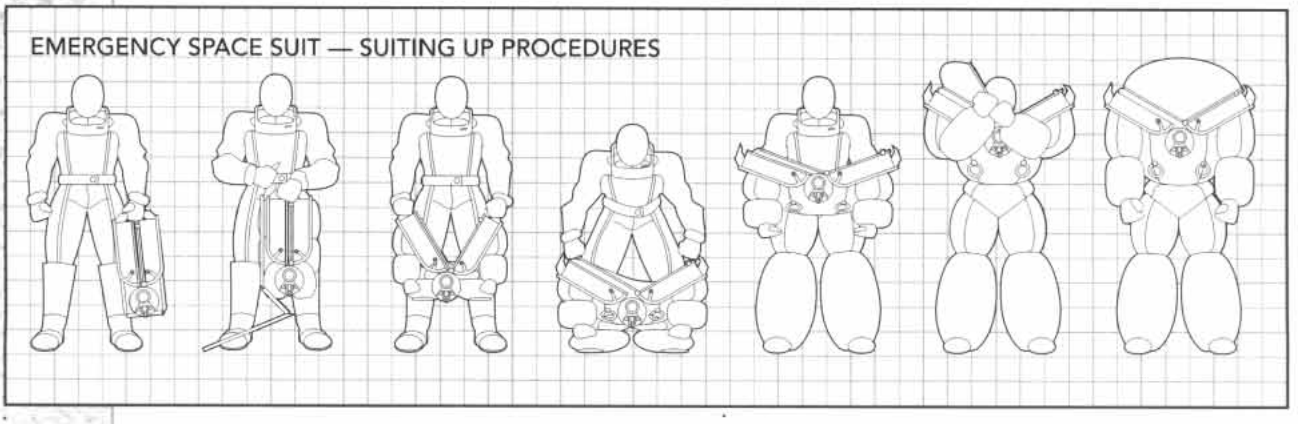
The *Hercules* is the common hard suit of the outer solar system, while the Venusian *Kame* (Japanese for "turtle") is the common hard suit of the inner solar system (though Mercurians call it "smelly"). A special variant, the *Shakunetsu* ("scorching heat"), is available for working on the Venusian surface at the expense of endurance and expansion space.

Armored Suits like the armored version of the Hercules, are regularly worn by marines in the various fleets. The suit is built around a one piece durashell torso with the limbs encased in articulated durashell plates. In essence, armored suits are hard worksuits with even more armor protection, meaning that manufacturers of commercially available hard worksuits are the same companies supplying the military. Few people have use for an armored suit outside of military or police organizations.

SOFT SUITS

Suit Type	Expandability*	Armor Rating	Encumbrance	Endurance	Mass (kg)	Cost (Cr)
Soft Worksuit	1/1/3/2	10	-1	8 hrs	10	5500
Civilian Crew Suit	1/0/0/2	18	-1	6 hrs+hookup	10	6000
Military Crew Suit	1/0/0/2	22	-1	6 hrs+hookup	12	8000
Apollo Crew Suit	1/1/1/1	16	0	6 hrs+hookup	8	6000
Pilot Suit	0/1/1/0	5	0	2 hrs+hookup	8	6000
Mars Suit	1/1/2/1	5	0	6 hrs+recharge	8	5000
Military Mars Suit	1/1/2/0	24	0	8 hrs+recharge	10	6500
Emergency Suit	0/0/0/0	5	12	30 min	1.5	1500

* Expansion Slots available in order: Helmet/Torso/Mission Pack/Legs



Augmented Suits have additional myomer and actuator additions to increase the effective strength of the user. These space suits are the last step before an exo-skeleton or exo-suit. The majority of materials are more flexible than a normal hard suit, technically making the augmented suit a heavy soft suit. These suits are considered hard suits because of the structural reinforcement that support the user and accommodate the myomers and actuators. Augmented suits are used where exo-skeletons cannot operate, or when exo-suits are too costly to use. The space suit doesn't increase the wearer's movement rate, but it gives the wearer an effective Strength of +2. (If the character has a STR of 2 or higher, they gain no benefit.)

Damage Control Suits are specially modified augmented hard suits for damage control crews. The most noticeable change is the smaller mission pack with a six-hour air supply and larger power supply. The increased power supply allows the suit to continuously power rescue equipment for about two hours. The suit has a crew station socket and a recharge port.

The suit's outer layers are replaced with a fire resistant material. A high-power radiation screen (10,000 rad/hr) is included for damage control in propulsion areas or under adverse solar conditions. An integrated damage control sensor suite incorporates all aspects of environmental monitoring; the two most commonly used feature are the remote temperature probe (to check for bulkhead and hatch hot spots) and a sensor that checks for ungrounded electrical connections. Gravity boots (see further) are also included to make moving in low gravity easier.

▼ ACCESSORIES AND OPTIONS

Space suit accessories and options are available for many different suit components: helmets, gloves, boots, life support, propulsion, and electronics. While the following items are the most widely available, players and Gamemasters can always create new items to add to their space suits. Indeed, modularity is a key feature of every space suit design.

Heads-Up Display: An integrated HUD is a standard feature of pilot helmets. It displays vital information on the faceplate. Pilots who are always surveying their surroundings for collision hazards while monitoring their internal status like to have vital information always in sight. Other professions also like to use helmet HUDs. There are two HUD models available: a 2D projection, and a 3D holographic projection.

Food Dispenser: Dispensers for food are available, though calling it 'food' is actually misleading, since dispensers don't actually provide solid products. Various nutrient rich pastes and thick drinks are normally dispensed through a tube that slowly serves the food when the user bites down on the helmet inner mouthpiece. Concentrate tablets are another common food supplement for space suit users.

"Just don't choke on it or you'll wish you hadn't such a taste for luxury." — Ardvarck Sim, Solar Cross.

Light Sources: Light sources of varying size and power are attached to the helmet. The light source is self-contained, though some of the most powerful versions carry their power sources in the mission pack. Helmet lights are rated by the effective range and arc they illuminate. The standard helmet light is a 20/45 light (20-meter range over a 45 degrees arc). The most common self-contained model upgrades are the 20/90, 50/45 and 50/90 (which uses a lamp on each side of the helmet).

HARD SUITS

Suit Type	Expandability*	Armor Rating	Encumbrance	Endurance	Mass	Cost
Hard Worksuit	1/2/2/2	30	-1	10 hrs	15	6500
Shakunetsu Worksuit	1/1/0/0	24/Fire	-1	6 hrs	16	8000
Armored Suit	1/2/2/1	50	-2	10 hrs	18	7500
Augmented Suit	1/2/2/2	25	-1	10 hrs	20	9000
Damage Control Suit	1/2/2/2	30	-1	6 hrs	20	11,000

* Expansion Slots available in order: Helmet/Torso/Mission Pack/Legs

Lights powered by the batteries in the mission pack are available in 100/45, 100/90, and 250/60 models (all of them a twin-lamp configuration). All light sources can operate for twelve hours before requiring a recharge, which can be done through a standard charge port (see below).

Waldo Gloves: A misnomer since they actually replace the suit's arms. Waldo gloves feature built-in controls for using remote manipulators. Activating the gloves allows the user to enter a control code to take over a set of robotic manipulators on any manipulator-equipped system. The back of the right hand glove has controls for calibration, motion and feedback. The back of the left hand glove has controls for manipulator override and the waldo-manipulator interface. Limited voice recognition is used to allow the user to freeze the manipulators when he needs his hands for something else. The manipulators do not unlock their position until the controls are unfrozen and the waldo gloves are returned to a position that approximates the manipulator's current position. Waldo gloves are only available in pairs.

Pseudo-Hands: A pseudo-hand is a mechanical hand and elongated forearm unit that mimics the user's hand movements via a hand waldo. This gives the impression that the user has longer than normal forearms. The heavy duty version gives the user a stronger grip strength and extended reach that is useful for handling extremely hot, cold or dangerous items. The light duty pseudo-hand is much narrower and smaller for detailed work in hard to reach places. Both versions have the option to include a light (+50 credits) and video feed to a helmet heads-up display (+250 credits).

Gravity Boots: The electroadhesive attachment system, or "gravity boots," is a common feature for colony cylinder workers. It gives the user the ability to walk along the construct in zero gravity conditions, which reduces MMU usage for increased durations. Gravity boots use molecular polymer technology to keep the user attached to whatever they are standing on. It provides the user with a +1 modifier for any Zero-G Movement test. The power supply is carried in a pocket above each ankle, but can be turned on or off from the wrist controls.

Reinforced Boots are constructed with additional composite panels and duraplast mail that reach the mid-thigh, enabling them to take extra abuse. The boots are simple additions for users that spend a lot of time on the surface of planets and moons. Frequent users are geologists who spend time on their knees, or in various crevices that might wear the suit's legs. Reinforced boots add six points to a soft suit's Armor Rating.

Armored Boots are composite-metal boots that reach the mid-thigh. They are meant specifically for users that spend a lot of time in above-average "hostile" environments. Prospectors and miners use armored boots to protect themselves from debris thrown out by mining equipment. The armor is appreciated when it absorbs blows from erratic equipment that would otherwise maim or sever the leg. It is also a lot cheaper to partially armor a soft suit instead of buying a complete armored suit. Armored boots add ten points to a soft suit's Armor Rating.

Radiation Screens: Radiation protection is provided by a magnetic screen generator attached to the suit's torso or mounted in the mission pack. Radiation screens are available in three levels of protection: 100 rads/hour, 1000 rads/hour, and 10,000 rads/hour. The most powerful version is normally used within the orbit of Venus, during times of increased solar flare activity, or in areas of high radiation. All screens come with an independent power supply sufficient for 12 hours of operation.

Endurance Upgrade: Space suit endurance upgrades are accomplished by mounting additional air tanks and batteries internally or externally. Internal upgrades permenantly increase the size and mass of the mission pack. External endurance upgrades lock onto specified attachment points with air and power connectors. The mission pack can carry a maximum of four external upgrades or two internal upgrades, though external upgrades are still usable with the internal additions. Each endurance upgrade increases the suit's endurance by two hours.

Recharge Port: For suits that are not normally fitted with an accessible recharge port, it can be retrofitted. The end of the connection, and suit socket, is shaped with the top half hexagonal and the bottom half square. This makes the connection easy and foolproof. The connection replenishes the suit's atmosphere supply, drinking water, and power. Separate oxygen and nitrogen lines mean that integral MMU systems are also refueled. A recharge port should not be confused with the resupply ports that are located on the side of a mission pack — an inaccessible spot for a lone person.

Manned Maneuvering Units: Every movement in freefall is governed by Newton's Laws of Motion: "for every action there is an equal and opposite reaction." Spacers sometimes refer to the laws as "Newton's Curse" when running low on reaction mass and performing complex orbital maneuvers. For people involved in long duration extra-vehicular activities, the simple act of moving a tired arm brings about Newton's Curse as the body moves in the opposite direction to keep the center of gravity at rest. Manned Maneuvering Units (MMUs) are a tool to help EVA personnel perform their jobs quickly and efficiently while keeping control of their motion and position in space. They consist of a set of precise rockets mounted on the backpack version of the mission pack. From the simple to the complex, a variety of MMU models are available.

The controls for MMUs are standardized between every model of MMU manufactured in the Solar system. A programmable switch is tied to each of the six basic motions: rotation about the x-axis (roll), y-axis (pitch) and z-axis (yaw), and translation along the three axis. By default, the left hand controls rotation, and the right hand controls translation. A failsafe switch built into the controls ensures that the MMU control does not activate when unintentionally hit. The most common control used is a large rocker switch that releases a controlled burst of reaction mass (producing a small fraction of a gee acceleration) for a single activation. The switch must return to the neutral position before another command is activated. This method allows for great control since a single burst that starts a motion in one direction can be cancelled by a single burst in the opposite direction.

MMUs can also be operated by voice commands. The degree of control allowed by the MMU is dependent on whether it is equipped for standard or advanced commands. In both cases, the voice commands can be deactivated prior to use. Basic switch-activated MMU motions are also available for vocal hands-free operation on advanced models. Regardless of the control system used, the MMU's computer attempts to make the most efficient use of the available reaction mass.

"I once had a partner who used swear words to activate his MMU. The poor soul was lost in space after forgetting himself in an argument. Really."
— Ardvarck Sim, Solar Cross

Integral MMU: Integral MMUs for space suits add a set of thrusters and reaction mass tanks to the top and bottom of the missions pack. The thrusters (2 MP) are set into the ends diagonal extensions at each corner of the mission pack. The MMU uses nitrogen gas, heated by the suit's thermal control system, for reaction mass (20 BP).

Advanced MMU: Advanced MMUs are identical to a normal integral MMU in every aspect (2 MP, 20 BP) except the degree of control. Advanced voice commands and inertial navigation allow the user greater flexibility and precision control of the MMU. Some of the commands available include precise rotation and lateral movements, stability and orientation correction (constant or specified), and moving at specific rates. Advanced MMUs are only available to expert users, since it is very easy to quickly deplete the onboard re-mass.

External Reaction Mass Tanks: Increased reaction mass is possible by attaching additional tanks (10 BPs each) to the suit. These are externally mounted to the MMU sections of the mission pack (since it is preferable to carry additional oxygen internally.) Integral and advanced MMU systems both have the necessary mounts to double their reaction mass capacity with external tanks that decreases the maximum number of external life support upgrades by two.

Enhanced Communicator: Enhanced communication systems provide improved voice and data transmission over longer ranges. The standard radio (-5 Comm, 10 km ground/1000 km space) is replaced with a more powerful radio (-3 Comm, 20/2000 km). The enhanced radio is also capable of handling real-time video and data transmission from equipment attached to the comm system.

Military-grade communicator improve their transmission capabilities with encryption, frequency hopping, and increase power output. The standard radio (-5 Comm, 10 km ground) is replaced with a powerful military version (0 Comm, 30 km ground). The military radio is capable of handling real-time video and data transmission from equipment attached to the suit comm system. This gives officers current situation intelligence during a mission for better command decision making.

Sensor Systems: Though a person can always carry a portable sensor unit, there are two methods for mounting sensors on space suits: modular and permanent. Modular sensors are mounted to an interface plate on the suit's torso. The suit's forearm control pad acts as the interface to the sensor; sensor data is also displayed on the control pad screens. Permanent sensors are simply hardwired into the suit; the sensor unit is still located on the suit's torso. It is not uncommon for people performing certain tasks, like prospecting or search and rescue, to have the appropriate sensor unit permanently attached to their space suit. Audible sensor alarms can be set with both versions to alert the user to important, or dangerous, readings.

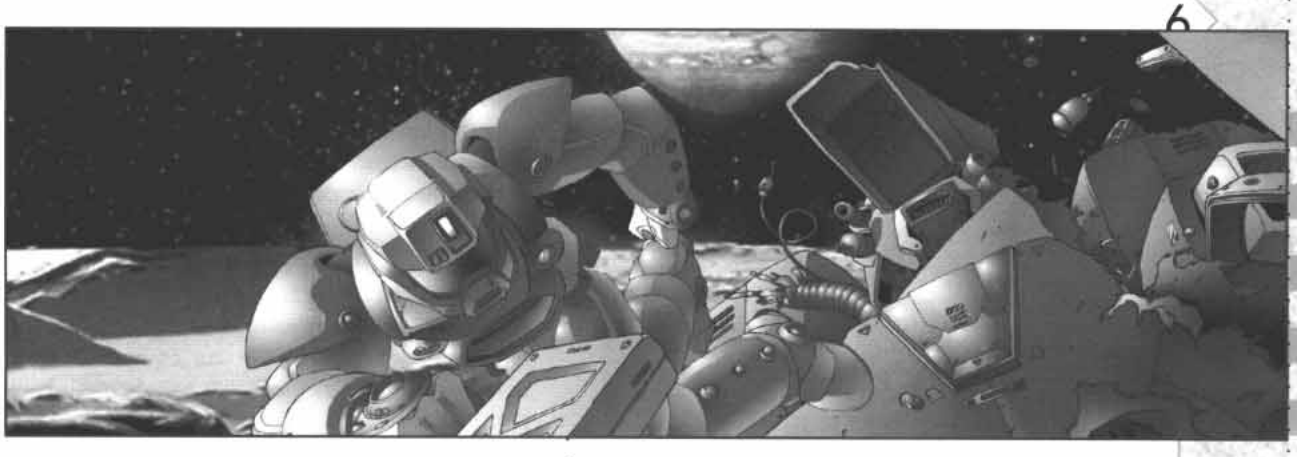
Installation of a modular sensor mount costs 200 credits. Modified portable sensors that mount on the suit cost an additional 10%. Permanently mounting a sensor system to the suit also costs an additional 10%.

Electronic Warfare packs: Two electronic warfare packages are available to mount on space suits, electronic counter measures (ECM) and electronic counter-counter measures (ECCM). Both systems use a separate power source, but their operating time is limited to approximately thirty minutes of continuous use. Either system is plainly visible from the numerous antennae on the mission pack's exterior. These antennae preclude the use of any other externally mounted options, like additional reaction mass. These systems are equivalent to Rating 1 vehicle system with a basic range of one kilometer.

Adaptive Fittings: Adaptive fittings allow a space suit to fit different accessories used for different tasks; thus, a single suit can perform the functions of several suits. In game terms, it allows a character to combine parts of different suits while ignoring penalties devised by the Gamemaster for wearing replacement parts. A universal helmet ring allows for numerous helmet fits, but different helmets must still fit different options. The adaptive fittings occupy the existing suit's torso expansion slots, it can now only accept the mission pack. Other body parts use the replacement's expansion slots. The partial Armor Rating p.165 is used to adjust the suit's new Armor Rating.

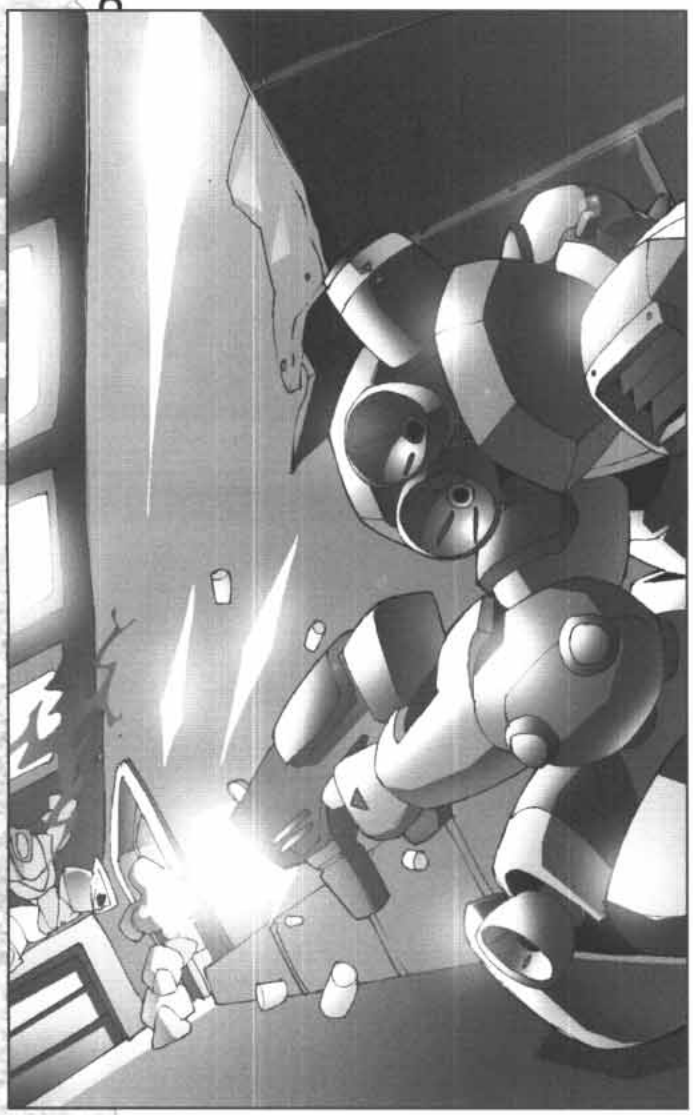
The accessory parts require some modification to attach to the adaptive fittings, but once modified can be easily attached and detached (two rounds) by a trained user. Components of other armors and accessories that are adaptive-fitting compatible cost an additional 25%. For example, compatible Waldo gloves would cost 625 credits.

Steele Grapple Gun: Grapple and lines are simple tools used to tether oneself to a spaceship or rock while working, so that a false move won't send the person tumbling into space. The Steele is a compressed gas gun that allows the grapple and line to be fired at a distant surface. The gun has the following stats: Acc 0, Base Range 10 m, x2 DM, costs 20 credits and weighs 0.5 kg. The gas canister is good for ten shots, and reloads are available for 2 credits (though the canister can be recharged by any standard pressure line).



SPACE SUIT ACCESSORIES AND OPTIONS

Equipment	Expan. Slots	Wt	Cost
Heads-Up Display, 2D	H1	-	400
Heads-Up Display, 3D	H1	-	550
Food Dispenser	H1	0.5	50
Lights			
20/90	H0	-	10
50/45	H0	0.5	20
50/90	H0	1	35
100/45	H0/M1	1	60
100/90	H0/M1	1.5	80
250/60	H0/M1	2.5	100
Waldo Gloves	T2	2	500
Pseudo-Hand, Heavy	T1	2	250
Pseudo-Hand, Light	T1	1	175
Gravity Boots	L1	2	500
Reinforced Boots	L1	2	200
Armored Boots	L2	4	400
Endurance Upgrade, Int.	M1	1.5	100
Endurance Upgrade, Ext.	M*	2	125
Recharge Port	T0	1	50
Integral MMU	M1	6	2000
Advanced MMU	M1	6	3500
External Re-Mass (10 BP)	M*	2	100
Radiation Screen (100 rad/hr)	T1	2	500
Radiation Screen (1000 rad/hr)	M1	3	1000
Radiation Screen (10,000 rad/hr)	M1	5	1500
Enhanced Comm	H1	1	150
Military Comm	H1	1	200
Sensor System	T1	*	200*
ECM	M2	4	2,000
ECCM	M2	4	2,000
Adaptive Fittings	*	4	5,000
Steele Grapple Gun	T1	0.5	20
H = Helmet, T = Torso, L = Legs, M = Mission Pack			
* See description on previous pages			



▶ TOOLS & EQUIPMENT

People need certain tools to carry out their daily lives. Whether at home, work or play, individuals rely on certain items to make tasks easier, or allow them to do things quickly and efficiently. It is impossible to list every item that a person could want or need, so Players and Gamemasters must compromise on the level of detail they want to include in their game.

These are some of the more common personal items available on the market. The items have been selected based on their usefulness to adventurers. It is obvious they represent only a very small fraction of the tools that exist on the open market.

Most of the following tools have been designed for use in gravitic environments, such as a planetary surface or the interior of a colony. Space-adapted versions are available for 1.5 times the cost; other statistics remain the same, although their external appearance may be drastically different.

There are thousands of manufacturing companies throughout the solar system, some well known, others not. All of the brands named in this chapter are recognized as reliable and sturdy, but others might not be so. PC's use equipment from unknown sources at their own risk. Sometimes if the quality is particularly poor, the object ceases to function, with potentially deadly consequences.

Abraham Microgravity Assistant: When CEGA gained control over the Orbitals, the resultant influx of untrained personnel resulted in a pressing need for an efficient navigational aide for the less graceful immigrants. Abraham Microgravity Assistants are small drones intended to help people move about in low gravity environments. When a user signs up for Abraham service, they are issued a unit, the design of which changes whenever new specifications are issued or when the unit is returned to a dealership for quarterly servicing. Not content to simply let these devices serve as navigational assistants, the designers also incorporate increasing functionality with each new revision.

The latest revision of the Abraham is an eighteen-centimeter sphere with four small handgrips and six vectored air/cold-gas reaction fan-thrusters. Most people just use the Abraham to cushion their arrival at a far wall, or to get them moving again when air resistance has brought them to an unintended halt. They can also teach people how to move in a foreign microgravity and rescue them when they get stranded. With the help of a small video screen, an Abraham unit can display short messages or animations (not to mention its whimsical, almost playful mode of interaction). The unit has Armor 10 but it's fragile: it will be put out of service by any "wound" received.

Benford Mechanical Tool Kit: This typical kit includes the basic tools required for routine maintenance and repair: two hammers, two power saws with adjustable blades, powered adjustable screwdrivers and wrenches, a laser knife, a power drill with bits, and a collection of rechargeable power cells and charger. All this fits in a 100 x 30 x 20 cm airtight toolbox. No mechanical repairs other than jury-rigging can be accomplished without a mechanical tool kit.

A **respirator** is a face mask that covers the nose and mouth to provide oxygen when a full suit is unnecessary. The respirator can use an independent air supply, or it can use filters and chemical scrubbers to provide clean air from the immediate environment. Short trips into the Martian atmosphere are possible with a respirator; however, proper clothing and goggles are required to prevent excessive UV radiation exposure.

The **emergency breather** is a full mask that covers the entire face and head. Slipping the breather over the head, the user seals the emergency breather around the face by several straps at the sides of the breather. A two hour air supply is included in a tank carried on a shoulder strap.

The **Rock Industries Claim Beacon** is used to identify ownership and claim status of asteroids and geographic locations on moons and planets. The beacon is a simple radio transmitter that broadcasts a repeated message declaring ownership, claim file number, and pertinent details related thereto. On more than one occasion disputes over the status of a valuable asteroid or area has arisen from the relocation or disabling of claim beacons. As a precaution, claimants usually place additional hidden and inactive beacon(s) to backup the original signal.

The **Personal Emergency Locator Transceiver** (PELT) is a compact version of a ship ELT, combining a transmitter and receiver. A lost or injured person can be located by other party members or searchers with greater ease. The rescue beacon on a space suit is equivalent to a PELT. OzoneTech is the leading manufacturer of PELTs.

Climbing Gear is used on planetary surfaces and to help move about on planetoids. The **auto-piton** is a climbing aid that fires a metal anchor into rock. It is easy to use with a single hand.

The **powered ascender**, or tether line, is used to carry a person up any line or cable capable of handling his or her weight. It looks like a large flashlight with a slot down the side for inserting the line. A handle, with the ascender controls, and a tether long enough to put around the foot, complete the unit.

Lighting: The *Sinclair Flashlight* is a small pen-like flashlight that has a range of up to 50 meters in a wide 90 degrees arc, or up to 300 meters in a narrow 3 degree beam.

When *Sinclair Glow Stickers* are removed from their pack and stuck to almost any surface, these luminescent stickers will provide enough light to read by for about an hour. Illumination will then quickly decrease, and fade out in about thirty seconds. Each pack holds 20 stickers.

The *Sinclair GlowRods* are a brighter, two-hour version of the company's glow stickers, packed five per box. Bending the polymer tube initiates the chemical reaction that produces the light.

The *Illuminator lamp* is a vacuum-capable area light. Whether running on an internal or external power source, it provides bright light over a circular area with a 100 meter diameter. The lamp sits on top of a four-meter post connected to a base containing the power source and external connections. All flashlights and lamps can use special ultraviolet and infrared filters to provide alternate illumination options.

LILU MultiPaz Electronics Tool Kit: This typical kit includes the basic tools and instruments required for routine electronic maintenance and repair: cutters; pincers; powered adjustable screwdrivers and wrenches; a laser knife; a minidrill; a saw; a multipurpose meter; a halogen minilamp; rechargeable power cells and charger. It fits in a 60 x 25 x 20 cm airtight and insulated toolbox. No electronic repairs other than jury-rigging can be accomplished without an electronic tool kit.

Mars Tent: The Mars tent is a two-person shelter for use on Mars. The aluminized polymer tent is inflated by directly pumping Martian atmosphere into the frame and floor. The same system also extracts oxygen and nitrogen from the atmosphere into the tent, so an occupant can remove his Mars suit. The entire tent is extremely robust. Any malfunction triggers a loud alarm, giving the occupants plenty of time get into a suit. The system requires recharging after three nights of use.

Restraints: Rugged polymer sheets and nets feature multiple attachment points, varying sizes, and options like camouflage patterns and reflective coatings which make them extremely useful. Smaller nets are often used to secure personal items in zero gravity conditions.

Velcro is widely used in microgravity environments. Reusable and permanent adhesive backed strips and patches are available in a wide range of sizes and colors. Until the late 21st century, velcro was used to secure people to a ship's "floor". As the human occupation of space increased, and people adapted to the microgravity environment, this practice passed out of usefulness since the majority of the space population didn't require such "amateur methods" for moving about.

Elastic cords and arresting tethers are commonly used to keep a person stable in microgravity. An elastic cord will stretch to allow some freedom of movement, but moving too quickly without being prepared can lead a person or item to smack into a wall or console. Arresting tethers are a gentler solution to remaining relatively immobile. The special tether reel is set at a particular length by a switch. Any tension, while the switch is engaged, is countered with a geometric increase in the tethers resistance. If the tether becomes slack, the reel takes up the slack and then releases it until it reaches the set point.

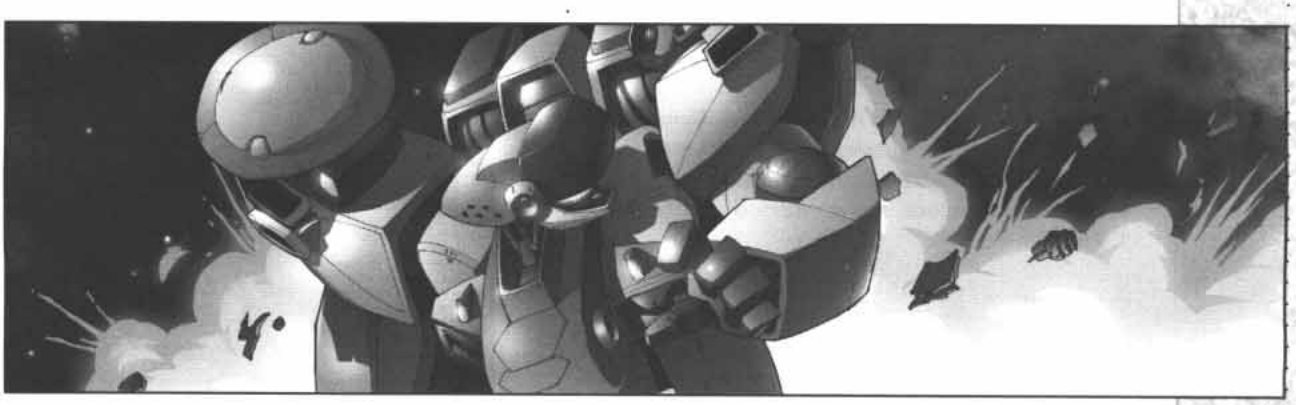
Composite tape, a descendant of 20th century duct tape, is an indispensable tool with excellent adhesive qualities and composite reinforced backing. It is widely used for making temporary repairs and securing items. Composite tape is available in 20 meter rolls and comes in a wide variety of colors. It is manufactured almost exclusively by the RG Tape Company.

Sport Transportation Equipment: Parafoils are a regular sight in colony cylinders. People not daring enough to fly the high speed, or muscle-powered, flyers will opt for the parafoil to experience flight. Parafoils are parachutes that are built with an airfoil profile. The leading edge of the parafoil is open, allowing air to fill the chambers that give the parafoil its lifting shape.

Bicycles are common personal transportation in colony cylinders and surface habitats. In many places, using a bicycle gains the user a small rebate on their housing fees. They are available in both single and double rider versions. Some bicycles come with an electric motor.

TOOLS

Equipment	Wt	Cost
Abraham Microgravity Assistant	4	150/quarter, 450/year
Benford Mechanical Tool Kit	5	300
Respirator	1	15
Emergency Breather	1.5	40
Rock Industries Claim Beacon	20	1000
Personal ELT	0.25	80
Auto-Piton	0.25	30
Powered Ascender	1	40
Sinclair Flashlight	0.5	10
Sinclair Glow Stickers, pack of 20	0.5	15
Sinclair Glow Rods (box of 5)	0.5	10
Illuminator Lamp	6	50
LILU MultiPaz Electronics Tool Kit	2	500
Mars Tent	5	200 (Mars only)
Polymer Sheet (2x2m)	2	10
Polymer Net (2x2m)	1.5	8
Velcro Patch (Box of 5)	0.1	1
Elastic Cord (0.5m)	0.1	1
Arresting Tether	0.5	10
Composite Tape	0.25	2
Parafoil	8	100
Bicycle (one person)	8	150
Bicycle (two person)	14	250
Bicycle (powered, one person)	11	200
Bicycle (powered, two person)	18	300
Visionary Systems Laser Imager	2	400
Visionary Systems Microwave Imager	2	500
Visionary Systems Thermal Imager	1	300
Infrared Light Filter	-	5
Ultraviolet Light Filter	-	5
Storage Case	3	20
Secure Storage Case	3	35
Transport Case	6	50
Secured Transport Case	6	65
Dual Spray, 6 canister	1	150
Emergency Patch, box of 10	0.5	50



▼ MEDICAL TECHNOLOGY

It is not always possible to prevent illnesses and deterioration of health. Accidents and combat can also severely threaten the well-being of PCs. Often, the quality of medical equipment available can make the difference between life and death.

Syntheskin Ltd. First Aid Kit: This small, lightweight kit includes everything needed to handle simple emergency situations: syntheskin bandages; antiseptic solution; cleaning sponges; one cutter; one clamp; hypodermic spray; and one dose each of Healing, Painkiller and Sleeping drugs. A Medicine Skill test without a kit suffers a -2 penalty. LifeTech Industries of Mars is the top brand, but Syntheskin is making a name for itself.

LifeTech Industries Field Surgery Kit: The Field Surgery Kit is a complete emergency medical treatment package. In addition to the items found in the First Aid Kit, the Field Surgery Kit includes scalpels and surgical tools, a multifunction pumping system, dehydrated blood plasma along with a re-hydrator, and an inflatable sterile tent. Using it is a Cpx 2 task, but it provides a +1 bonus to the Medicine test. The premier brand name is also LTI, but the Earth sphere's various manufacturers are also recognized as above-average quality.

Cathiode Electronics H31-P Hand Mediscanner: This small hand-held device helps diagnose health problems. Within about 24 seconds, it can record vital signs and determine if someone has been infected with a specific disease. It adds a +1 bonus to Medicine Skill tests for diagnosis. Jupiter's Cathiode Electronics produce the reliable H31-P model.

MercMed Portable Hospital: A Portable Hospital is the ultimate in mobile medical equipment. In addition to a Field Surgery Kit, it features: a Hand Mediscanner, a multipurpose chemical analysis and synthesis laboratory, a computer-assisted VR surgical system, an ultrasound imaging system, artificial-bone modeling tools, and a miniature growth tank for skin and muscle tissue. Using it is a Cpx 3 task, but it provides a +2 bonus to the Medicine test, in addition to being able to regenerate missing tissues. It is contained in a 1.5m x 1.5m x 1m box.

◇ DRUGS

Euforan Euphoric Drug: This compound is not really a medical drug, though it is sometimes administered to victims of panic and anxiety attacks. It is also sometimes used as a recreational narcotic. This drug is manufactured by a wide variety of companies such as Herbeal's of Earth, and Jupiter's Lichorp.

Relaxin Painkiller Drug: This commonly available analgesic helps reduce the pain from wounds, diseases or chronic conditions. It is applied locally by hypodermic spray. A less potent version is available in tablets under several trade names.

Sed-dan Sleeping Drug: This popular sleeping aid is a safe sedative with euphoric and analgesic side effects. It was carefully designed to make it very difficult to overdose.

Vitamax Healing Drug: This liquid solution, which must be administered daily, doubles the healing rate of any individual. For each daily dose missed, an additional day will be needed for any wound to heal completely

◇ VACCINES

Vaccines are compounds of specifically engineered attenuated viruses and bacteria administered to individuals in order to boost their immune system. Each vaccine usually protects against about a dozen specific diseases, and costs between 5 and 200 credits. Vaccines give a +2 bonus to the appropriate Health roll.

MEDICAL EQUIPMENT

Item	Mass (kg)	Cost (credits)
Syntheskin Ltd. First Aid Kit	2	50
LifeTech Ltd. Field Surgery Kit	10	650
Cathiode Hand Mediscanner	1	500
MercMed Portable Hospital	25	4,500
Drugs		
Euforan, 1 dose	0.01	20
Relaxin, 1 dose	0.01	8
Sedan, 1 dose	0.01	5
Vitamax , 1 dose	0.01	10
Vaccine, 1 dose	0.01	5-200

MEDICAL EQUIPMENT

Drug	Potency	Onset Time
Euforan	12	15 min
Relaxin	8	2 min
Sedan	9	30 min

▼ COMMUNICATIONS

In most places, telephones, video screens and computers are all linked and work together as one unit. Simple voice or video communications are usually cheap. Interplanetary rates are much higher however, and talking face to face is not possible due to the long lag time involved.

Communicator: This apparatus is used to transmit and receive data through radio waves, from long waves all the way to ultra high frequencies. There are three basic models, differentiated by range. Cheaper models, such as Nakumacom's hand-held LW Radio have an effective range of 10 km. Mid-range models like Speechtech's Celurite line have a range of 100 km and high-end sets that can broadcast as far as 1,000 kilometers are produced by JVD Electronics. None of these models have built-in encryption capacity and all are very vulnerable to jamming.

Headset and Wristcom: Headsets are the communications device of choice to groups that need to stay in contact with each other, have their hands free to perform other tasks and also have no need to conceal their purpose. A variant called the wristcom is worn as a small metal band around the wrist. The standard systems available to the public have a range of 5 km. They are produced in many locations, such as the Nakumacom plant on Earth.

C-Cure Listening Device: This simple device is similar in many ways to the first listening devices ever used by humans- a microphone surrounded by a broadcasting or recording device and enclosed in a miniature box. The greatest advances in these technologies have been found in the concealment capabilities of the device, although advances in miniaturization and broadcasting power have occurred as well. There are a myriad of producers of these devices, and a large variety of models from which to choose as well. Many private detective agencies suggest that the best of these — besides military models — are made by C-Cure, and there are stories of investigators who could not find "bugs" which they had planted, despite the fact that they knew the bug was still present and operating as it was supposed to.

JVD Electronics Satellink: A satellink communication unit is simply a small device that enables a computer, radio or VR terminal to receive direct link data from orbiting satellites. It comes with its own parabolic antenna and both broadcasts and receives on a direct channel. It cannot be used while moving due to the precise antenna alignment which must be maintained during operation, unless the satellite broadcasts in wide bands. JVD Electronics is the primary producer that sells to the solar system at large, but there are other manufacturers who have quality performance in this area as well. Although it is not difficult to acquire one of these devices, the access codes of the satellite which the owner wishes to use the Satellink with must be known before communication can begin.

Masuo-PANet VR Terminals: The development of high-speed computers and light weight data display devices have enabled the creation of quite convincing virtual realities (VR). A user equipped with VR goggles and body sensors can easily become an actor in a play, take part in a party on a station hundreds of kilometers from his home or learn a new skill. VR technologies have also spawned many very advanced video games.

Most *Public Access Networks* (PAN) have a VR display option in addition to the usual plain text and multimedia displays, but not all of the broadcasts are available since some field reporters wisely refuse to carry around the heavier and more cumbersome 3D camera. Fully interactive VR programs usually cost between 5 and 10 credits per hour, but most worthwhile educational programs, and some high-end entertainment suites can cost upwards of 100 credits per hour. Stacks of datadisks with pre-recorded programs can also be purchased. Each disk can hold 2 hours of VR and costs between 1.5 and 5 credits for average material. Major VR producers include ZONet news agency and ThespaSight Entertainment. Coffin rooms often feature PAN terminals.

VR Suit: The first thing a neophyte will notice when putting on a VR suit is the mass of the suit; the combination of sensors and feedback devices needed to provide a convincing tactile illusion are heavy. Each VR suit comes with a small onboard processor block that determines the suit's reactions to the environment. Suits that provide more than pressure and texture feedback are extremely rare, and more than ten times as expensive as the standard type. VR glasses are needed to complete the suit and cost an additional 150 credits.

Newsman Audio/Video Recorder: This multipurpose camera-like apparatus can digitally record and playback high-quality sound and video. It uses small memocards to store the recorded data, which come either in single ten-minute cards or stacks of 30, 60, 120 or 240 minutes.

Masuo Datapad: The Masuo is a common small "dumb" computer that serves as a combination of personal agenda, address book, notepad, etc. It can be linked to a computer system to download or upload information, but cannot run programs on its own.

Public Comm Terminal: Videophones are the most common home and public telecommunications device. A touchscreen and 2D-video camera with sound are combined into a single unit. Public comm terminals charge a small fee for use. The average public use rate is one credit per five minutes. The terminal also includes a port for a data pad or portable computer for remote access and data transfers. Public terminals are located around communication system nodes. Finding the terminals in a crowd is easy; simply look for the node's transmitter above people's heads.

Terra Orbital Laser Comm: The Terra Orbital Laser Comm system is a line-of-sight/point-to-point laser system that allows for secure and undetectable short range communications. The system is a small fist-sized unit that encases the laser and comm system, and a subvocal microphone (see page 137). It looks like a small pair of binoculars, and functions in a similar manner. Looking through the unit's eye piece, the user sees a dot at the point where their unit's laser will hit. The receiving unit, in position to receive, has a glowing circle — only visible with another Laser Comm unit — that indicates where to aim the dot. When both users have their opposite member "hit" (the dot in the circle), a secure connection is established.

InterLink Systems Hydra Comm Network: The InterLink Systems Hydra Communications Network is an intelligent, military-grade communications system. The system is a broadband, encrypted, frequency-agile system. The system uses three distinct comm units as part of the network: a command unit, a platoon unit and a transmitter station.

The command unit coordinates a section of the overall network. The command staff can selectively monitor any part of the network, or communicate directly with a single unit. Under the direction of the command unit, the transmitters within the network can triangulate the position of any friendly comm unit within range of the system. This feature is especially useful for commanders since they can instantly locate any contact with a hostile force by the reporting unit's transmission alone.

The transmitter station is a link in the communication chain. The station is both a retransmitter that extends the reach of the overall network, and a traffic controller that intelligently handles communication priority and volume. The optimal network setup requires each station to be capable of connecting to two or more other stations. If part of the network is ever disrupted, the transmitter stations redirect comm traffic around the disrupted section. Transmitter stations are only used in rear-areas and fixed deployment zones, though some units adapt them to vehicles for increased comm network stability for mobile actions.

The platoon unit is the smallest, a cylinder 40 centimeters long and 20 centimeters in diameter. The unit acts as a central node for squad/platoon level communications. The individual troops are issued military comm links keyed to this unit. The platoon unit is video uplink capable for providing command staff with realtime information. In the case of a mobile conflict, individual platoon units act as transmitter stations within the network, or connect directly with a command unit.

COMMUNICATION TECHNOLOGY

Item	Rating	Range	Wt	Cost
Nakumacom	-5	10km	0.25	20
Celurite	-5	100km	1	500
JVD Electronics	-5	1000km	10	10000
Headset/Wristcom	-5	5km	0.5	25
Listening Device 1000	-	50m	0.01	50-
JVD Electronics Satellink	0	Orbit	2.5	200
Masuo-PAN, VR Terminal	-	-	5	250
VR Suit	-	-	2500	5
Audio/Video Recorder	-	-	1	200
Memocards				
10 minutes			0.05	1
30 minutes			0.05	2.5
60 minutes			0.05	4
120 minutes			0.05	7.5
240 minutes			0.05	14
Masuo Datapad	-	-	0.1	200
Public Comm Terminal	-	-	-	-
Terra Orbital Laser Comm	+1	500m	0.25	250
InterLink Systems Hydra Comm Network				
Command Unit	+1	150km	25	2500
Transmitter Station	+1	150km	8	1500
Platoon Unit	+1	15km	3	600Item

◇ COMMUNICATION ACCESSORIES

While some features are common to all communication devices, other features are not incorporated for reasons of expense, lack of demand, or regulatory restrictions. The following accessories are the most frequently used options for those who want or need expanded capabilities for their communication devices.

Voice Scrambler: Voice scramblers are commercial versions of military "light" encryption systems that attach to existing non-military communicators. The scrambler takes normal speech, encrypts it, and then sends it out as "static" using the normal unencrypted communicator frequency. The person on the receiving end of the link also requires a voice scrambler to decrypt the static into normal speech. Each voice scrambler is capable of using one of several thousand encryption codes, so the people involved must agree on the code to use before the call is placed.

Signal Scrambler: Many military communications contractors offer their equipment to the public as scaled down versions of the military system. Signal scramblers are small chips with the necessary encryption/decryption algorithms built-in. The chips are small enough to fit inside all but the smallest communicators. The truly paranoid often find methods for using the scrambler chips as additional encryption in their other "valuable" items. While it doesn't make blocking the transmission harder, it does make a significant difference in deciphering the encyrpted transmissions over normal routines. The military does not like this practice, but there is little they can really do about it.

Signal Repeater: Signal repeaters, placed at regular intervals, extend the range of radio frequency communications by re-transmitting the signals they receive. Some sophisticated versions of the repeater receive the radio signal and send a point-to-point laser to another repeater that broadcasts the received signal. Colonies and arcologies often use repeaters in areas with poor transmission and reception without the need to install a full communication node. Several communication companies — Nakumacom, Cello Technology, Commtronics — produce signal repeaters, while JVD Electronics and Terra Orbital produce top of the line laser repeaters.

Signal Booster: Signal boosters are a power pack and antenna that increase the signal strength by broadcasting the signal through the improved transmitter. This means the range and quality are improved measurably. The signal booster is installed by hardwiring a connection to the communicator's antenna leads, though disconnecting the original antenna is not required. The communicator can still transmit using its normal antenna, activating the signal booster as required.

Subvocal Microphone: Subvocal microphones allow a person to use a radio with barely a sound. Subvocalization is like whispering, except it is much quieter, with the sound barely passing a person's lips. The microphone rests against the person's throat and is activated by the person "speaking" or by a button on the unit. Subvocal microphones are meant for stealthy communications, so they are not something the public regularly uses.

◇ SURVEILLANCE

Information is a very valuable commodity in a technologically advanced society. Large amounts of information are exchanged every second as light, electrons, or sound. The ability to capture someone else's information can give a person or business an edge on a competitor, or destroy their reputation. It can also be used to protect innocent people from harm.

COMMUNICATIONS ACCESSORIES

Item	Rating	Range	Wt	Cost
Voice Scrambler	-	-	0.25	300
Signal Scrambler	-	-	-	600
Signal Repeater	-3	5km	2	75
Laser Repeater	+1	10km	3	300
Signal Booster	+1	+5km	0.5	150
Subvocal Microphone	-	-	0.1	10

Microcamera: Microcameras are produced by many companies with remarkably similar specifications. Nominally they are for use in other consumer products, like displays and headsets, which often have basic cameras built into them for video communications. When sold individually they are intended for use as replacement components. In fact, most such sales are to private investigators, or just plain unlicensed snoops, seeking to use them as a poor man's spy device. Microcameras are cylinders about a five millimeters long and two across. To be used as a spy device, a microcamera must be equipped with a recording peripheral or transmitter.

Microphones: Not all listening devices are minute packages planted in a fixed location. Advances in technology have improved surveillance microphone systems that can pickup sound vibrations through walls. Any microphone system only operates effectively at fairly short ranges. Any distance further than 100 meters lessens the reception quality geometrically.

Directional microphones are strictly line-of-sight; any intervening object will block sound reception. Both microwave and laser microphone detect vibrations of sound against surfaces like external walls and windows. Windows are the favored target for these devices, since any wall thicker than ten centimeters greatly degrades the reception quality.

Dataline Taps: Dataline taps require a physical connection to the dataline. This means placing the tap in the transceiver for a radio signal, into the fiber optic line, or rarely, the conductive wiring. In each case, the dataline tap uses a recorder or burst transmitter to relay the information collected, though the recorder requires the data be physically collected. Some systems — especially those on Earth — still use conductive wiring for datalines. The *wire tap* is connected to exposed wire or leads by clips to detect the pattern of electrical impulses.

The *fiber optic* tap is the most difficult to place since a data loss of more than a few microseconds will, at the least, alert the operator to a possible maintenance problem. Longer disruptions are viewed even more suspiciously. The unit fits around the target line, and once it is securely in place, a special optical blade cuts into the fiber optic line. The blade is a few microns thick, and is photo-sensitive, so each pulse of data is translated into a small electrical charge of the blade that the unit stores for collection or transmission.

The *transceiver* tap is a actually a sophisticated transceiver of its own. The tap need only be connected to, or place in close proximity to, the receiving or transmitting antenna. A uni-directional antenna ensures that burst transmissions by the tap don't interfere with the transmissions of the tapped antenna.

Discretion Devices: Discretion devices are designed to disable listening devices and systems. They are usually quite small, and are often disguised as jewellery. There are three types of discretion devices for defeating different eavesdropping technologies. These devices are available individually, though some high quality designs do incorporate one or more of the devices. (Add together the cost of the devices included.)

White noise, or "static noise," generators are the most common discretion device. They emit sound that does not interfere with conversation, but does garble any attempt to listen to a conversation with a bug or microphone. The white noise effectively blankets the normal conversation, making it very difficult to sort out what is said. A variation on this device produces randomized vibration "static" in contact with a wall or window. The contact discretion device effectively masks the vibrations that conversations produce, thus defeating laser and microwave microphones.

Many listening devices broadcast the sound they pickup to another receiver close by. The *radio frequency (RF) discretion device* is a miniature radio static generator that covers a wide range of the RF band. Since the transmitting device doesn't use much power, the RF discretion device uses sufficiently low power that it does not interfere with normal broadcast RF traffic.

Dataline Scanners: A dataline scanner uses the cable's signal noise to detect a tap on the line. Dataline taps connected to conductive wiring can generate feedback that is detectable. The scanner sends out its own signal and analyzes how it changes. The most foolproof method to scan a dataline is visual inspection of the hardlines. The *visual dataline scanner*, or VDS, is actually a small, remotely controlled robot that can travel through dataline conduits looking for physical tampering. This is the only way to defeat a correctly placed fiber optic tap.

Listening Device Scanner: Listening device, or "bug," scanners detect the minute transmissions and power signature of listening devices. The scanner is a wand antenna that is passed over a surface to detect any transmissions or the device's minute power signature. The system is not infallible, however, since some advanced listening devices include a sleep mode or remote activation. Even when a scanner doesn't detect a bug, it is still prudent to use discretion devices to ensure the privacy of any conversation.

SURVEILLANCE EQUIPMENT

Equipment	Wt	Cost
Microcamera	5	.005
Directional Microphone	0.25	50
Laser Microphone	0.5	75
Microwave Microphone	0.5	75
Wire Tap	0.1	75
Fiber Optic Tap	0.1	200
Transceiver Tap	0.1	150
White Noise Generator	0.1	25
Vibrational Discretion Device	0.1	30
RF Discretion Device	0.1	30
Dataline Scanner	0.5	60
Visual Dataline Scanner	0.1	150
Listening Device Scanner	0.2	100

▼ SURVIVAL GEAR

This section covers equipment and tools helpful for survival in difficult environments. This includes wilderness areas such as outbacks or deserts. While much of this equipment is most useful on Earth, it is also used on Mars and in the "wilderness areas" included in several Orbital and Jovian colonies.

Corado Backpack: A general use backpack, which can hold up to 0.5 cubic meters and 100 kilos of assorted material. It is completely waterproof. Vacuum-proof models are available for twice the cost, though they do not supply proper life support.

FarSight Binoculars: These standard binoculars can give up to 200x magnification and have rudimentary electronic motion detectors. Ordinary binoculars without motion detectors are also available at half cost, such as the popular Ryerson Explorers.

OzoneTech Climbing Gear: This pack, which can be used either for mountain climbing or spelunking, includes a 50 m rope, spikes, crabs, cams and other protective devices, various loops and lengths of webbing/sling, an ice ax, spiked climbing boots, an oxygen mask with a two-hour supply, a radio flare, a helmet with HUD altimeter, a powerful headlight (range: 300 m) and a miniature 10 km radio communicator. OzoneTech also sells the elements separately.

Misawa Gas Mask: A lightweight Earth design that covers the face without impairing the wearer's vision, this mask filters polluted air and will protect against most types of smoke and gas. This mask will not protect against toxins absorbed through the skin, nor will it enable one to breathe in a vacuum or underwater.

Forger Ltd. IR Goggles: These goggles can be used at night to detect sources of heat, such as animals, humans, vehicles and the like. They do require some practice (at least two or three hours) to use effectively, however.

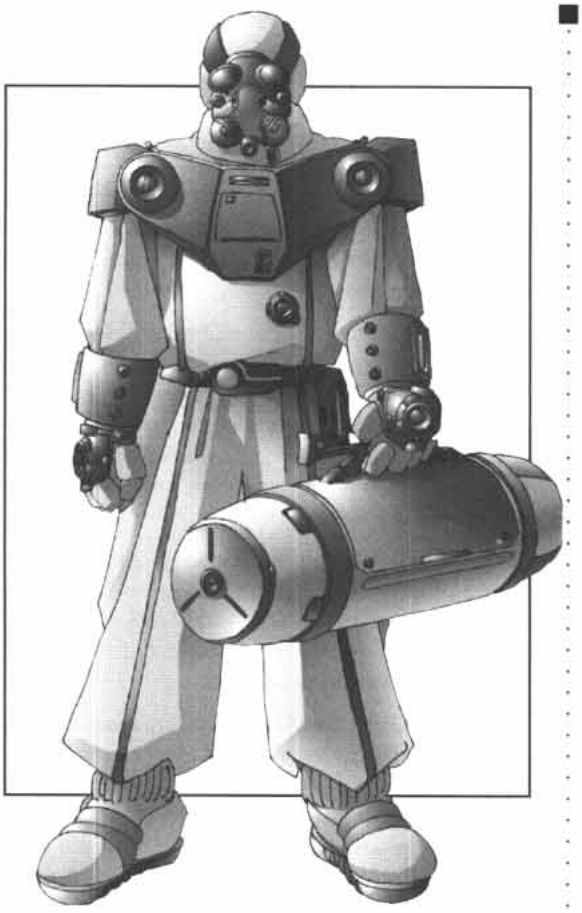
Ares Meta-Compass: This multipurpose compass has an internal gyroscope and can point to many useful reference points, such as planetary poles, galactic poles, important stars, etc. When brought to another planet, it must be reset with the time of day, latitude and longitude to be of any use.

Stine Optics Night Goggles: These goggles, equipped with electronic motion detectors and an ultraviolet mini-spotlight, enable the viewer to see even in complete darkness, up to a maximum range of 50 meters. On a perfectly clear starry night, their effective range increases to 500 meters.

StarCom Radio Flare: This is an emergency magnesium flare which also generates a short but powerful radio signal. Rescue units are attuned to this signal, and will identify it as a call for help.

Sinclair Rope (50m): A cord made out of resilient composite weave, about 0.5 cm thick, able to support a maximum weight of about five tons. Available in greater strength and length, and can be exposed to vacuum and extremes of temperature.

Shuss Orbital Shelters & Emergency Bubbles: These consist of egg-shaped pods of reinforced plastic that offer minimal protection against space environments. Used both as shelters and emergency safety devices, Shuss' products take up remarkably little space when folded (20 x 10 x 5 cm for a one-person shelter).



The packed shelter is 50 x 30 x 20 cm for the five-person model. They are made to be pressurized in less than six seconds, but the compressor, air reserve and life support pack must be bought separately — these cost half the price of a vacuum suit. The shelters/bubbles come with a small one-man airlock and are aluminized on the outside. They provide limited thermal insulation (from -100 degrees to 300 degrees Celsius).

OzoneTech Survival Kit: This survival kit includes a compass, a light yet resilient bedroll, a sheet of high-performance insulation, one week's worth of survival rations, nylon string and hooks, a multi-purpose knife, a collapsible canteen, a lighter (three hours fuel), and a radio flare.

Quinn Foods Ltd. Survival Rations: These rations can sustain a person for up to a week, and will stay edible for up to two years. They are water and vacuum-proof until opened.

Survival Suits: A variety of survival suits are freely available on the market. Each of these suits protects against a specific environment, and suit models are available with more than one protection feature for 1.5 times the total costs of all suits and armors so combined. Weight is equal to 1.5 times the weight of the heaviest suit.

Desert suits protect against dry, high-temperature environments and are specially designed to recuperate and distill lost bodily fluids. With this suit on, a man can comfortably function in up to 50 degrees Celsius, with a daily water ration of 250 ml.

Diving suits offer some thermal insulation, enabling divers to enter water of temperatures as low as -5 degrees Celsius without suffering from hypothermia. A gill-like device extracts oxygen from the water and compresses it into the tank, which can hold up to two hours worth of air. Maximum diving depth is about 200 meters.

Fire suits are designed to protect the wearer against very high temperatures (up to 1000 degrees Celsius), and resist most damage from fire sources. It includes a gas mask and air cooling unit.

NBC suits protect against Nuclear, Biological and Chemical contamination, have self-contained breathing apparatuses with an autonomy of 2 hours, and offer five rads per hour of radiation protection.

Rad suits protect against hard radiation, either by means of specialized lining or with a small screen generator. They offer protection of up to ten rads per hour.

Vacuum suits, the most complex of survival suits, allow a person to survive in a vacuum. These skin-tight suits are made of a self-sealing material that will repair a hole of up to 0.5 cm in diameter in one round. The air and power reserve usually contains up to six hours' worth. They offer little insulation and no physical protection, but they count as sealed against NBC effects.

Winter suits are insulated and internally heated to offer complete thermal protection for a period of up to 12 hours. After this period, it will allow the wearer to comfortably withstand temperatures as low as -100 degrees Celsius.

OzoneTech Tents: Used by campers, explorers and the military, modern high-performance tents take up remarkably little space when folded (20 x 10 x 5 cm for a two-person tent, 50 x 30 x 20 cm for the 20-person model). They can resist winds of up to 65 kph, and will provide some limited thermal isolation (from -10 to 30 Celsius).

OzoneTech Water Distiller: This lightweight, practical distiller can produce about one liter of water every day on Earth. It can also be used on Venus and Mars, but only produces one quarter liter per day because of the lower moisture content in the atmosphere.

Mobile Emergency Shelter: The mobile emergency shelter is a self-contained emergency shelter on wheels or tracks that moves the shelter a safe distance away from a habitat emergency. Mobile shelters are located at the outer perimeter of a habitat. On Venus, mobile shelters are lowered to the ground on winches from the lower surface, and around the edges, of the arcologies. The Moon and Mars have mobile shelters located along the perimeter of surface habitats.

OUTDOOR AND SURVIVAL GEAR

Item	Mass (kg)	Cost (credits)
Corado Backpack	4	75
FarSight Binoculars	0.5	50
OzoneTech Climbing Gear	7.5	1,000
Misawa Gas Mask	0.5	40
Forger Ltd. IR Goggles	1	200
Ares Meta-Compass	0.2	100
Stine Night Goggles	1	350
StarCom(c) Radio Flare	0.5	15
Sinclair Rope, 50m	1.5	10
Orbtital Shelters, 1 person	2	250
Orbtital Shelters, 5 person	6	750
Survival Kit	5	200
Survival Rations	1.5	30
Survival Suits		
Desert	3	750
Diving	10	500
Fire	6	800
NBC	12	1,200
Rad	8	1,000
Vacc	6	5,000
Winter	4	450
OzoneTech Tent		
2-person	1	50
20-person	6	250
OzoneTech Water Distiller	1	175
Mobile Emergency Shelter	250	100,000

▼ FIRE FIGHTING

Ideally, fires on ships are fought by evacuating the atmosphere from the section where the fire is. (Indeed, military ships remove all atmosphere to combat fires and explosive decompression.) However, smaller fires, or fires in heavily occupied sections that cannot be evacuated quickly, still require alternate methods of control and suppression.

Foam Bomb: Foam bombs are a common fire fighting tool. They are spherical shape with recessed grips for handling. They can be set so that the pressurized fire retarding foam explodes when exposed to high heat, or set on a timer. The ability to deliver fire retardant by indirect methods decreases the crew exposure to a dangerous fire. A crewmember can temporarily open a fire blocking door, toss in a few foam bombs (each covering and extinguishing a variable area of 1d6 x 1d6 meters), and close the door again without risking injury or spreading the fire. Foam residue starts to break down within a few hours, leaving a powdery film that is easy to clean up.

Fire Extinguishers: Chemical spray extinguishers are located along corridors to deal with small spot fires caused by electrical shorts and other causes. Most extinguisher chemicals are designed to be non-conductive, or form non-conductive residues, to inhibit further electrical fires. Inert gas and chemical fire containment systems are common equipment throughout military ships; inert gas systems flood the affected room to smother the fire or dilute combustible gases. Chemical systems commonly use fire retardant foam, though traditional dry or wet chemicals are also available. Civilian vessels feature similar systems in vital areas like engine compartments and fuel storage, or anywhere flammable materials are stored.

FIRE FIGHTING

Equipment	Wt	Cost
Foam Bomb	4	50
Fire Extinguisher	2	15

▼ STRUCTURAL REPAIR

Sometimes the damage suffered by a ship is structural in nature, and it must be repaired, reinforced, or even patched, to allow the ship to conduct the minimum required operations to reach a dock. These are some of the most common methods and items for conducting temporary structural repairs on damaged space structures.

Sealants: Leaks of all kinds occur on a regular basis. Rapid hardening polymer sealant sprays are used by crews to temporarily seal atmosphere leaks in about five seconds. Most sealants are stored in varying sizes of extinguisher-shaped containers, which are colored green to avoid confusion with an extinguisher. A handheld irradiation unit is available to increase the sealant's setting rate.

Sealant bombs are similar to foam bombs. Capable of sealing a small room (25 cubic meters), a sealant bomb is an inelegant, but quick, method of sealing any breaches in the room. Sealant bombs are spherical in shape with recessed grips for handling. They can be set to explode the sealant on contact or on a timer. Shortly after the sealant explodes, covering everything in the room, a flash irradiation unit in the bomb's center sets the sealant in about a second. This gives crews the ability to seal a room still undergoing decompression.

People trapped by a sealant bomb need to be cut free, or a spray solvent can dissolve the material. After the breach is repaired, the solvent is applied to remove the sealant. Non-essential items trapped in the sealant are left until the repairs are completed.

Sealing sheet is a metallized polymer sheet that is spread across a hull breach. Sealing sheet is more durable than polymer sealants, and is capable of temporarily sealing breaches up to one meter by one meter. The sheet can be cut with a special sheet tool to fit the breach. The sheet can then be unrolled, or placed, across the breach. Beams can be laid across larger holes to support multiple sealing sheets. The special sheet tool also includes a contact welder that flash welds the sheet to the hull and beams. When sealing sheet and a hard polymer sealant are used in combination, a unpressurized section can be repressurized until more permanent repairs are made. Some foolish and cash poor civilian crews have even used laminates of sealants and sealing sheet to make "permanent" repairs.

Expansion Columns: Expansion columns are self-contained hydraulic cylinders. The columns are used to reinforce deformed hull sections and structural members that are under stress. They are placed to relieve enough of the load so that further damage is not incurred. Each end of the column is equipped with special configurable grips to keep it from slipping out of position. Misplacing a column can have dire consequences, such as punctured bulkheads and crushed crewmen. Expansion columns come in three lengths — one, two and four meters — that exert up to five tons of pressure. Each column can extend to three times its length.

Reinforcing Beam: Reinforcing beams are simple metal or composite rods that are wedged or welded into position. Compared to the expansion column, reinforcing beams are an inelegant solution, but simplicity works. The beams are easily cut by powered shears to fit into any location. They are easy to weld or glue into place, and can be used in different orientations. Welding several beams into simple structures increases their strength and functionality beyond a simple rod of metal or composite.

STRUCTURAL REPAIRS

Equipment	Wt	Cost
Sealant Spray	2	20
Sealant Irradiation Unit	1	25
Sealant Bomb	4	50
Sealing Sheet (1x1m)	1	30
Expansion Column (1m)	20	350
Expansion Column (2m)	35	600
Expansion Column (4m)	55	1100
Reinforcing Beams	2-10	15-75

▼ SEARCH AND RESCUE

Trying to find a ship in distress within the Solar system is a monumental undertaking to begin with, akin to finding the proverbial needle in a haystack. Those who undertake such a task, however, never give up hope that they will make it on time. Once a ship in distress is located, and its crew and passengers are found to still be alive, they must be evacuated immediately if it is not safe for them to remain onboard. This task is a common one for military vessels, especially given the current tensions and skirmishes between the Jovian Armed Forces and CEGA Navy.

Hummer Rescue Saw: The Hummer rescue saw has a special 30 centimeter diameter blade for cutting through nearly any material. Combining a regular circular saw with Hummer weapon technology allows the user to quickly cut through doors, bulkheads, and debris. The rescue saw uses a standard power cell and drains two power units per minute of operation. The saw can be used as a clumsy weapon.

Sas Opener: The sas opener is used for forcing open locked or jammed doors and airlocks. It has a powerful motor and transmission coupled with a set of lockjaws. It takes 1d6 turns to set up properly, and will open the door or airlock with two turns. The power source has ten energy units. Opening a door with standard resistance takes one energy unit, while heavy resistance requires two energy units. A door that is intentionally welded or pinned will drain five energy units.

Powered Shears: Powered shears are a large pair of hyper-tough alloy scissors used for cutting though almost anything. Once the actuators are engaged, it takes about 1d6 minutes to finish cutting. The blades close too slowly, and the shears too cumbersome, to be used as a weapon. The shears have enough power for ten minutes of operation.

Rescue Jaws: Rescue jaws, referred to as the "jaws of life" by SAR techs, are combination sas openers and powered shears. This tool is capable of opening and closing its metal jaws with enough force to open jammed doors and snap beams. Use the same rules for the sas opener and powered shears. Beams require one energy unit per minute of operation. Rescue jaws have a large power supply of 15 energy units.

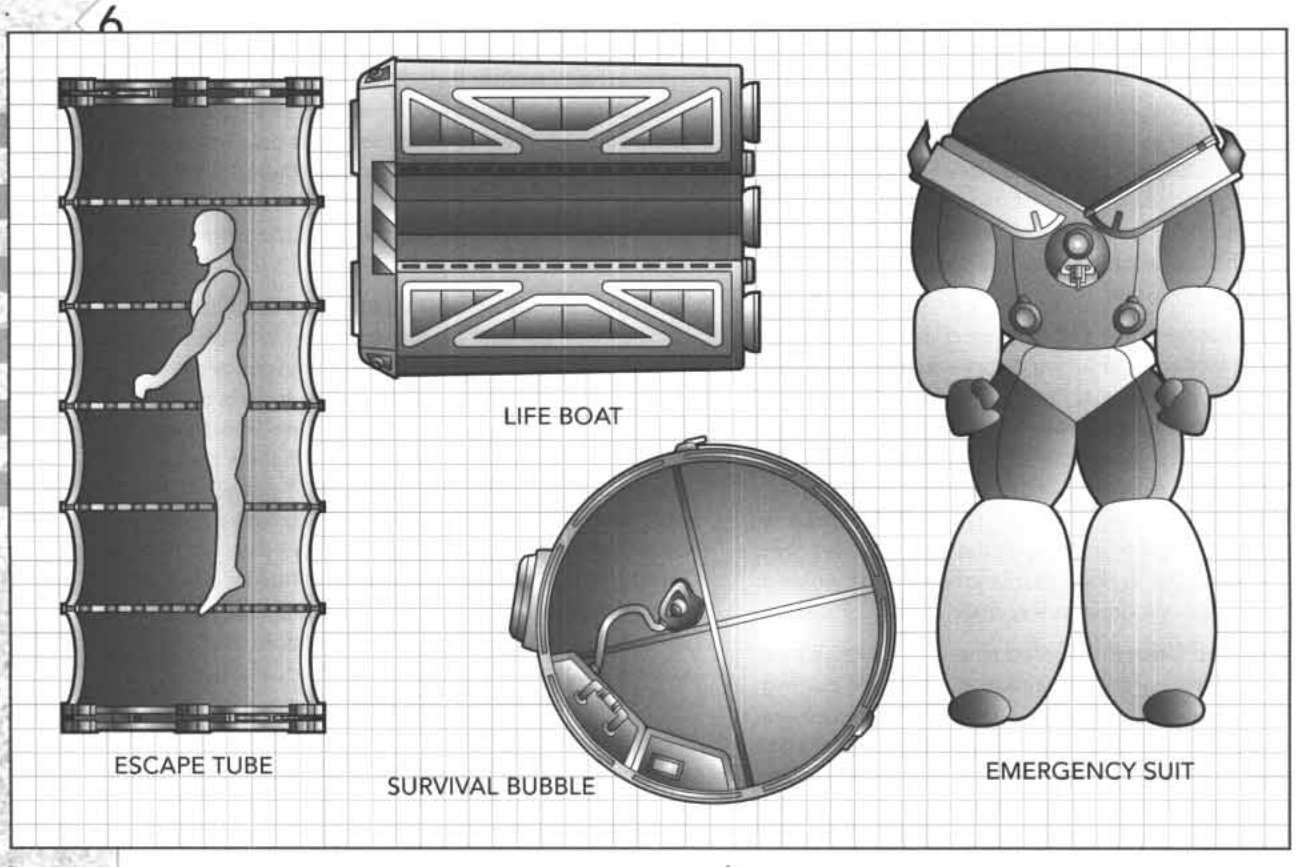
Cathiode Electronics S&R Sensor: The Cathiode Electronics Search and Rescue sensor is a combination of several sensor classes. The major function of the SAR sensor is environmental monitoring — atmosphere, hazardous materials and radiation. The human heart produces a distinctive electromagnetic (EM) field that is used by SAR teams to locate survivors. When the sensor is placed against a door or bulkhead, it detects the faint signal caused by a beating heart while sophisticated algorithms remove any strong or weak artificial EM fields.

Emergency Atmosphere Bubble: An emergency atmosphere bubble is an opaque polymer bag and a small oxygen bottle. The bubble is placed over the head of a victim without oxygen, and secured with a special polymer seal. The bubble's low-pressure oxygen supply lasts for about five minutes, and contains a mild analgesic and sedative to keep the user calm. The inside of the bag is coated with an agent that traps exhaled carbon dioxide. This is usually sufficient to provide the rescuers a few more precious seconds to free a trapped person otherwise lacking oxygen.

Emergency Atmosphere Generator: Emergency atmosphere generators are complex biochemical reactors that produce oxygen for emergency purposes. An initial oxygen-nitrogen reserve is used to quickly repressurize a small volume (less than 20 cubic meters.) The atmosphere is then circulated through a biochemical filter of genetically engineered bacteria and chemical scrubbers to convert carbon dioxide into oxygen that is returned to the atmosphere. The unit has an operating lifespan of six hours. In habitats and ships where individual rooms and corridors can be sealed, an atmosphere generator is usually stored with other emergency supplies. This allows the area to be used as a temporary shelter in an emergency. The unit is composed of a gas cylinder and the rectangular scrubber unit with a carrying handle attached.

Portable Airlock: The portable airlock is a container that includes a reinforced polymer airlock, atmospheric gas, and lock cycling machinery. The airlock is often used as a temporary replacement when the normal airlock equipment suffers failure. They are also used for gaining access to depressurized ship or station sections that cannot be accessed by a proper airlock. A portable airlock can be set up in under two minutes by personnel trained in its use. With regular replacement of lost gases and power system recharge, it is possible to operate the unit until it fails completely, albeit at reduced safety levels.

The airlock frame is formed by inflating cells in the polymer material with gas produced from a chemical reaction. The end of the airlock that is the inner door has polymer skirt that is attached to the access point with a spray adhesive. Both airlock doors use a special electrohesive zipper system to create an airtight seal. The airlock is large enough for two people to use each time it cycles. Since the airlock machinery is located inside the airlock, a remote control panel is secured outside each door. Depending on the airlock's pressure status, and whether personnel are entering or exiting, the airlock does not disengage the zipper system seal until it is safe to do so.



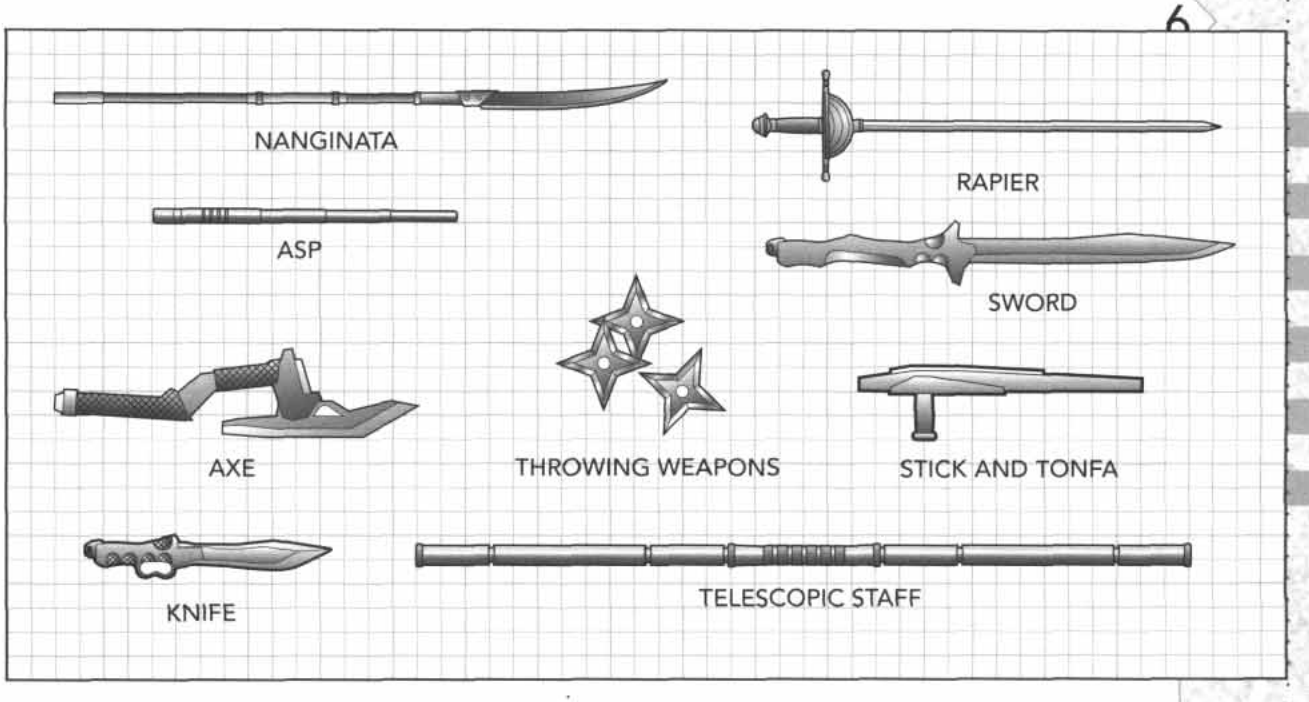
Escape Tube: The escape tube is used to transfer people between two ships with functional airlocks. The escape tube is made from an opaque, high-tensile polymer with reinforcing composite mesh, so it is extremely strong and flexible for its appearance. The escape tube can stretch up to fifty meters between two vessels, and is capable of being pressurized to a standard ship's atmosphere (five psi). Each end has a hard seal ring that is large enough to cover any standard-size airlock door. The inside of the tube has several lines for a person to pull themself through the tube.

Escape tubes can be dangerous if the situation is not entirely stable and static. In one case, a small deviation in ship vectors lead to the detachment of one end of a tube. The slow drift apart stretched the tube until the ring could not maintain the seal. Two people in the airlock at the detached end and three people in the tube were blown into space.

Oxy-Life: Oxy-Life is a slow release agent that provides oxygen directly to the blood stream while increasing the body's ability to use and retain oxygen in the blood. A small module (about 5 cm x 5 cm by 1 cm) is attached to the patient's chest, by an adhesive pad, above the heart. Unfortunately, Oxy-Life is only effective for about five minutes before it becomes harmful. Applying additional modules will keep the victim alive without breathable atmosphere, but each module after the first inflicts a Flesh Wound. If the patient's blood is not purified within an hour of application, the patient suffers a Flesh Wound each hour until their blood is purified. Blood purification is only available with proper medical facilities onboard ship, on colonies, or with a portable hospital unit.

SEARCH AND RESCUE EQUIPMENT

Equipment	Wt	Cost
Hummer Rescue Saw	10	1000
Sas Opener	15	1000
Powered Shears	15	1000
Rescue Jaws	20	1500
Emergency Atmosphere Bubble	1	100
Emergency Atmosphere Generator	10	400
Portable Airlock	20	2000
Oxy-Life	0.1	100



▶ WEAPONS

While personal sidearms are not as strictly regulated as more powerful rifles and heavy weapons, the general public associates weapons (of any type) with either law enforcement and the military, or with criminals and mercenaries. The public trusts that law enforcement and military personnel are properly trained to minimize damage and show restraint in their use of firearms; however, the same cannot be said for anyone else. Unless a character is clearly identifiable as acting for a law enforcement agency or the military, the public will go to great lengths to him and will report him to law enforcement officials at the first safe opportunity. Life in space is dangerous enough as it is.

▼ MELEE WEAPONS

This category includes traditional hand-to-hand weapons, which have evolved little since the antiquity of humanity. These are mostly used inside ships and stations to reduce the chance of damaging vital components such as air filters. They also lack the power required to breach most ship or station hulls.

These weapons are used with the Melee Skill; each category of Melee weapons can use a corresponding Melee Skill specialization.

TERMINOLOGY

ACC is the weapon's accuracy;
DM is the weapon's Damage Multiplier, which is multiplied by the attacker's Margin of Success. AD and UD are the character's Armed and Unarmed Damage ratings;
Range indicates the Short/Medium/Long/Extreme ranges of a weapon, in meters. "Close Combat" means the weapon can only be used in melee; "Throw" means the melee weapon can be thrown using the Throw skill;
ROF shows the weapon's burst fire bonus. Single shot weapons have a ROF of 0; a ROF of 0/X means the weapon can only be fired once every X turns;
Ammo is the number of bullets and/or charges found in the weapon's magazine. These normally come in clips or power packs;
Cost is the manufacturer's suggested retail cost of the weapon, in credits. The number after the slash is the cost for a full reload;
Wt. is the weapon's loaded weight, in kilograms;

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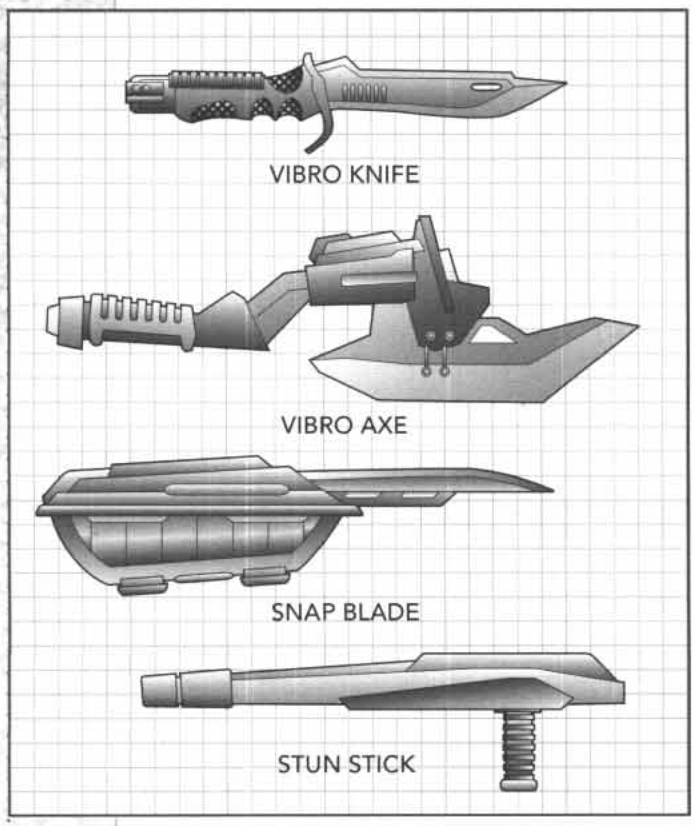
MELEE WEAPONS, LOW TECH

▶ Blunt Weapons	ACC	DM	Range	ROF	Ammo	Cost	Wt.
Club, short	0	AD+5	close combat	n/a	n/a	5	1
Club, medium	0	AD+9	close combat	n/a	n/a	10	2
Nightstick	0	AD+6	close combat	n/a	n/a	20	1
Quarterstaff, wood	0	AD+7	close combat	n/a	n/a	7	2.5
Quarterstaff, metal	0	AD+11	close combat	n/a	n/a	25	4
Tonfa	0	AD+6	close combat	n/a	n/a	20	1
▶ Knives							
Small Knife	0	AD+3	Throw	0/2	n/a	10	0.25
Large Knife	0	AD+5	Throw	0/2	n/a	15	0.5
Machete	0	AD+8	close combat	n/a	n/a	20	1
▶ Swords							
Long Sword	0	AD+11	close combat	n/a	n/a	100	1
Cutlass	0	AD+10	close combat	n/a	n/a	75	1.5
Katana	0	AD+13	close combat	n/a	n/a	300	1.5
▶ Axes and Polearms							
Hatchet	0	AD+7	Throw	n/a	n/a	15	1.5
Ax, Large	0	AD+11	close combat	n/a	n/a	50	2
Ax, Pole	-1	AD+12	close combat	n/a	n/a	100	2.5
▶ Spears							
Spear, short	0	AD+8	Throw	n/a	n/a	20	1.5
Spear, long	-1	AD+12	Throw	n/a	n/a	35	3



◇ MELEE WEAPONS, HI TECH

Hi-tech melee weapons are traditional melee weapons made deadlier by technological additions or modifications. They require an extension cord or a power pack of some sort in order to function.

Hummers: Hummers are melee weapons whose blade vibrates at very high frequencies, producing a distinctive humming sound. The vibration enhances their lethality as well as giving them better penetration against protective armor. Hummers use standard electrical and beam weapon power packs, draining one unit per full minute of use. Using them requires the Melee Skill.

Electric melee weapons: These weapons are similar to their low-tech counterparts, save for the fact that they also deliver an electrical shock whenever they hit. If the attack succeeds, or if the defender uses a non-grounded weapon to parry, the victim is subjected to additional electrical damage, applied separately. The Intensity of the shock can be set from one to ten, draining a corresponding number of charges from the power pack. Adjusting this setting requires one action.

Common electrical versions of archaic weapons include metal club, staff and tonfa. Electrified weapons use the same Skill as their non-electric counterparts.

HI-TECH MELEE WEAPONS

▶ Hummers	ACC	DM	Range	ROF	Ammo	Cost	Wt.
HummerKnife	0	AD+9	close combat	n/a	30	150/10	0.5
HummerMachete	0	AD+15	close combat	n/a	30	325/10	1.5
HummerKatana	0	AD+20	close combat	n/a	30	1,000/10	2
▶ Electric Melee Weapons							
Any melee weapon type	same	same/elec.	same	n/a	30	+75/10	same

▼RANGED WEAPONS

Ranged weapons include all beam, projectile and thrown weapons. Ranged weapons usually need some sort of ammunition and/or power source,which may or may not be compatible from one weapon to another (weapons using the same caliber ammunition should be considered compatible for simplicity).

Bows are manufactured by Anachronism Weaponry, a Mars-based weaponsmith using piezo-electric material to built low technology weapons.

Chemical Slug-throwers: These weapons deliver damage through chemically propelled physical bullets. Handguns, rifles, shotguns and submachineguns fit this category. While chemical slugthrowers use primitive technology, they are cheap to manufacture and remain very efficient. Drawbacks are an obvious signature (chemical slugthrowers are loud and produce a distinctive "flash" in the dark) and a moderate recoil, which can make aiming a series of shots difficult, especially with an automatic weapon. All of these weapons are used with the Small Arms Skill.

Holt Exterminator Pistol: fires a large caliber, hypervelocity round. While the term "hand cannon" has described numerous large caliber handguns since the 20th century, the Exterminator has owned the title since the mid-22nd century. Truly unsuitable for use in space, the Exterminator has a fearsome reputation that goes beyond the 15 millimeter short round it fires. The Exterminator was, and still is, the favored sidearm of CEGA assault troops on Earth, whose acts of barbarism shocked both enemies and allies. The large muzzle diameter, top-mounted box magazine, and side-mounted ring sights make the Exterminator easily identifiable, especially when it is pointed at you.

Colt-Silver 9mm Machine Pistol: has a high rate of fire in a small package that effectively gives the machine pistol the operation of a submachine gun. Serious military personnel scorn the lightweight weapon, but it has found favour with criminal elements that are looking for easily concealed firepower.

Gyrockets: are handguns and rifles that fire small rocket-propelled bullets. These weapons are actually more efficient at medium and long range than from up close, as the bullet is still accelerating at short range. The first (lower) Damage Multiplier should be used if the target is at Short range; otherwise, the second one is used. Gyrockets have little or no recoil.

Ares Waffenfabrik AR-4 Gyroc Assault Rifle: has a negligible recoil making the weapon increasingly popular with law enforcement, marine units, and, unfortunately, pirates. The weapon uses a bullpup configuration to keep the weapon compact without sacrificing accuracy to a shortened barrel. Waffenfabrik has also redesigned AR-4 rounds for increased effectiveness versus armor by using an explosive-driven penetrator. This reduces the Armor Rating of the target's armor by 10 points.

GS-1 Sniper Gyroc Rifle: Building on their expertise in gyroc weapons, the engineers at Ares Waffenfabrik continue to create unique applications for gyroc weaponry. The GS-1 uses a shortened bullpup configuration with targeting scope and UV targeting laser. The shell uses two-stages to increase the rifle's range over a standard gyroc. The shell is also equipped with a semi-active guidance system to home in on a target painted with a laser. In game terms, the shooter must make two To-Hit rolls against the target. The first To-Hit roll is to ensure the targeting laser (+1 Accuracy; ranges as listed in table) is on target when the gyroc round is fired; apply Aiming bonuses to this roll. After the laser To-Hit roll is made, immediately roll to hit with the gyroc round. If the targeting laser roll was successful, the guidance system in the gyroc acquires the laser, and the shooter gains an additional +1 bonus for the gyroc round; apply Aiming bonuses to this roll also.

If the shooter is careful not to move the aim point too radically, the shell can actually be steered around obstacles with a fair degree of success. One clever assassin used this feature to his advantage by making the round strike from an angle that led security personnel to descend on an adjacent building, thus gaining enough time to make good his escape. Pressure by law and government agencies has forced Ares Waffenfabrik to restrict the production and sale of the GS-1 to law enforcement and military personnel only.

"The GS-1 is so simple to use a ten-year-old kid could make a living as an assassin."

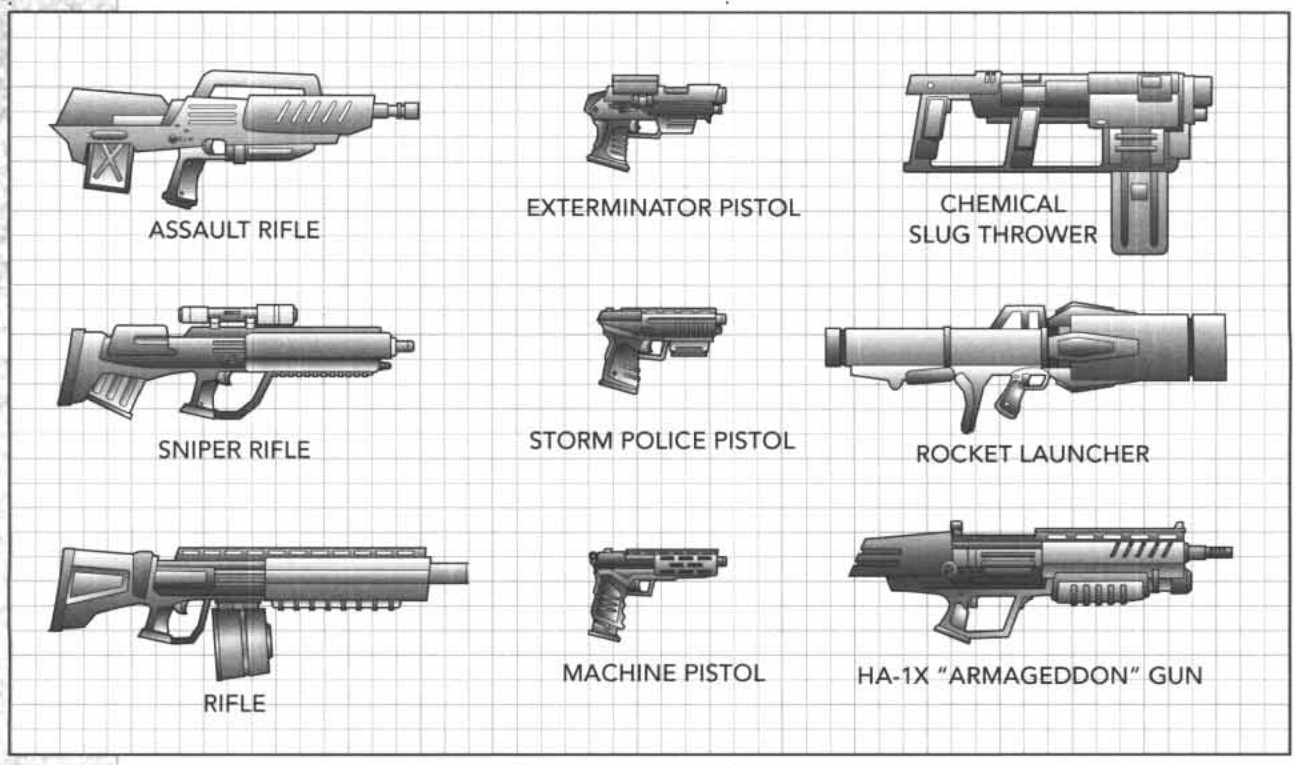
— Pietr Hoffman, Former Ares Waffenfabrik Sales Manager (quoted shortly before his termination from the company.)

Gaussian weapons: Gaussian weapons use a magnetic effect to propel bullets or flechettes at very high speeds. Gaussian weapons have an unmistakable "thunderclap" auditory signature as the projectile breaks the sound barrier. Gaussian weapons need both power packs and ammo, which are usually combined in one easy-to-load clip (incompatible with other weapon's power packs and ammo clips). All these weapons are used with the Small Arms skill.

Needler: This is the smallest of all gaussian weapons. Easily concealable, it fires a volley of small nylon-tipped metal flechettes which mushroom and burst upon contact, penetrating and lacerating body tissues. Flechettes can be made to contain a weak nerve poison that acts as a fast-effect sedative (Potency 10, Onset time: 4 combat rounds). It is certainly possible to make flechettes containing other toxins. Needlers are innefective against any form of armor; double the rating of any Armor present.

Gauss Rifle: These are the magnetic equivalent to gunpowder rifles, using their long barrel to accelerate bullets to very high speeds.

Gauss Shotgun: This weapon bears little resemblance to its gunpowder equivalent; it is much longer, and the barrel is narrower. Instead of propelling a somewhat scattered volley of pellets, the gauss shotgun fires them in a rapid, precise stream, the pellets following almost exactly the same path through space. Penetrative power is enhanced at the expense of some tissue damage. A gauss shotgun reduces the effectiveness of Armor by 10.



RANGED WEAPONS

▶ Bows	ACC	DM	Range	ROF	Ammo	Cost	Wt.
Light Bow	0	x7	5	0/1	1	150/1	0.5
Medium Bow	0	x10	6	0/2	1	200/1	1
Heavy bow	0	x15	7	0/2	1	450/2	2
▶ Handguns							
6mm Revolver	0	x7	5	0	6	120/2	0.5
9mm Revolver	0	x14	6	0	6	200/4	1
9mm Heavy Revolver	0	x23	7	0	5	350/5	1
11mm Revolver	0	x25	7	0	6	400/5	1.5
7.5mm Pistol	0	x10	6	0	10	150/4	0.5
9mm Pistol	0	x15	6	0	9	225/6	1
11mm Pistol	0	x24	7	0	8	425/8	1
9mm Autopistol	0	x15	8	1	40	475/25	2
Holt Exterminator Pistol	0	x40	6	0	4	500/15	2
Colt-Silver 9mm Machine Pistol	0	x15	12	+2	50	600/30	2.5
▶ Rifles							
6mm Carbine	0	x18	45	0	1	175/0.5	2
7mm	0	x24	50	0	20	280/10	4
7.5mm	0	x28	60	0	10	375/5	4
7.5mm Assault Rifle	0	x28	65	1	40	750/25	4.5
8mm	0	x32	75	0	10	500/6	4.5
15mm Sniper Rifle	+1	x40	100	0	4	900/5	6
▶ Shotguns							
.410	0	x22	6	0	10	120/5	2
12-gauge	0	x28	7	0	8	200/5	3
Autoshotgun (12G)	0	x28	6	1	50	1,200/30	6
▶ Submachine Guns							
7.5mm	0	x12	22	2	40	450/15	3
9mm	0	x18	25	2	30	575/20	3.5
11mm	0	x24	30	2	30	750/30	3.5
▶ Gyroc							
Gyroc Pistol	+1	x15/25	10	0	15	675/15	1
Gyroc Rifle	+1	x22/32	80	0	15	950/15	3.5
AR-4 Gyroc Assault Rifle	+1	x20/30	40	+1	30	1500/40	3.5
GS-1 Sniper Gyroc Rifle	+1*	x25/45	200	4	1500/100	5.5	
▶ Gauss Weapons							
Needler	0	x7	5	1	15	100/5	0.5
Gauss Rifle (8mm)	0	x35	85	1	30	800/30	4
Gauss Shotgun	0	x20	40	2	40	1,050/40	4.5

◇ BEAM WEAPONS

This category covers weapons that fire beams of energy, as opposed to physical missiles. These weapons use power packs in lieu of ammo clips. These packs are usually interchangeable (with other beam weapons as well as electrical melee weapons) and come in a variety of sizes. Beam weapons come equipped with laser-targeting devices. In the case of laser weapons it is simply a low-power version of the main beam, activated by resting the finger on the trigger.

Laser Pistol: This is the quintessential personal beam weapon. It fires a thin, invisible beam of coherent light which will quickly burn through most materials; non-reflective armor effectively protects with only half of its normal value. The weapon has three different settings, which drain 1, 4 and 9 energy units, respectively; the weapon's three Damage Multipliers correspond to these settings.

Laser Rifle: This is simply a more powerful and accurate version of the laser pistol. It has five settings (which drain 1, 4, 9, 16 and 25 energy units); the five Damage Multipliers given in the weapon's stats correspond to these settings.

Jovian Optics Pulsar-Alpha Laser Pistol: This is a pulse laser weapon. To achieve a higher rate of fire, two standard power cells are used to balance the heat generated by the rapid power drain; each power cell alternates feeding power to the lasing chamber. Each Damage Multiplier listed in the table consumes 2, 4 or 8 energy units, respectively; against non-reflec armor, halve the armor's normal Armor Rating. The Pulsar-Alpha is restricted to the first two Damage Multipliers listed when fired in pulse mode to conserve energy.

Nakima H4 Heavy Laser Pistol: Nakima is a Venusian company, and one of the leading manufacturers of laser weaponry in the solar system. (Jovian Optics would say that is only because Nakima has stolen their designs.) The H4 is a (partially) successful attempt to build a laser pistol that can inflict laser rifle damage. The H4 has only two power settings that draw 12 or 20 energy units, respectively; against non-reflec armor, halve the armor's normal Armor Rating. The high power drain of the H4 means the power clip and pistol can become very hot. If the attacker fires two shots in the same turn, or fires single shots for two or more consecutive rounds, a WIL test versus a Threshold of 1 plus 1 for each shot after the second is made. A failed roll means the character drops the pistol due to the heat. The GM may modify or ignore this roll if the character has something protecting their hands.

"When they say it can get a little warm, they mean warm enough to heat an emergency ration pack to a palatable temperature. Mind you, the person on the receiving end isn't expecting to be quite so thoroughly cooked by a mere pistol either."
— Anonymous Weapons Dealer

Dessa Hotshot-5 Laser Pistol: This gun has three primary power settings using 3, 6 or 9 energy units per shot, corresponding to the Damage Multipliers listed in the table; against non-reflec armor, halve the armor's normal Armor Rating. In addition to three normal power settings, the emergency "hotshot" anti-armor setting (x80) consumes 25 power units. The "hotshot" setting also burns out the pistols quickly, reducing the Accuracy and DMs by one each time the emergency setting is used.

Jovian Optics Pulsar-Delta Laser Rifle: This is the big brother of the Pulsar-Alpha. The Delta uses the same alternating power method to achieve a higher rate of fire, except that it uses a special dual-sectioned power cell. Each Damage Multiplier listed in the table consumes 4, 8 or 16 energy units, respectively; against non-reflec armor, halve the armor's normal Armor Rating. The Pulsar-Delta is restricted to the first two Damage Multipliers listed when fired in pulse mode to conserve energy.

Sniper Laser: A bulky item, it is a high precision weapon designed for long range performances. It has only two settings: targeting mode (which causes no damage) and 40. The system is composed of the gun proper and a backpack-mounted capacitor.

Walter-Stromm Police Special Sidearm: This is the standard sidearm of many patrol officers in colony cylinders and other contained environments. The Police Special Sidearm is an over-under sonic stunner-laser combination that uses a common power cell. The accuracy of the laser decreases the chances of stray shots that can damage important structures and, more importantly, innocent bystanders. The integrated sonic stunner also provides the option for non-violent apprehension (see *Sonic Stunner*). The power cell connection is just in front of the trigger guard. The cell itself carries a larger charge than a normal laser or stunner cell, and lays along the underside of the laser barrel.

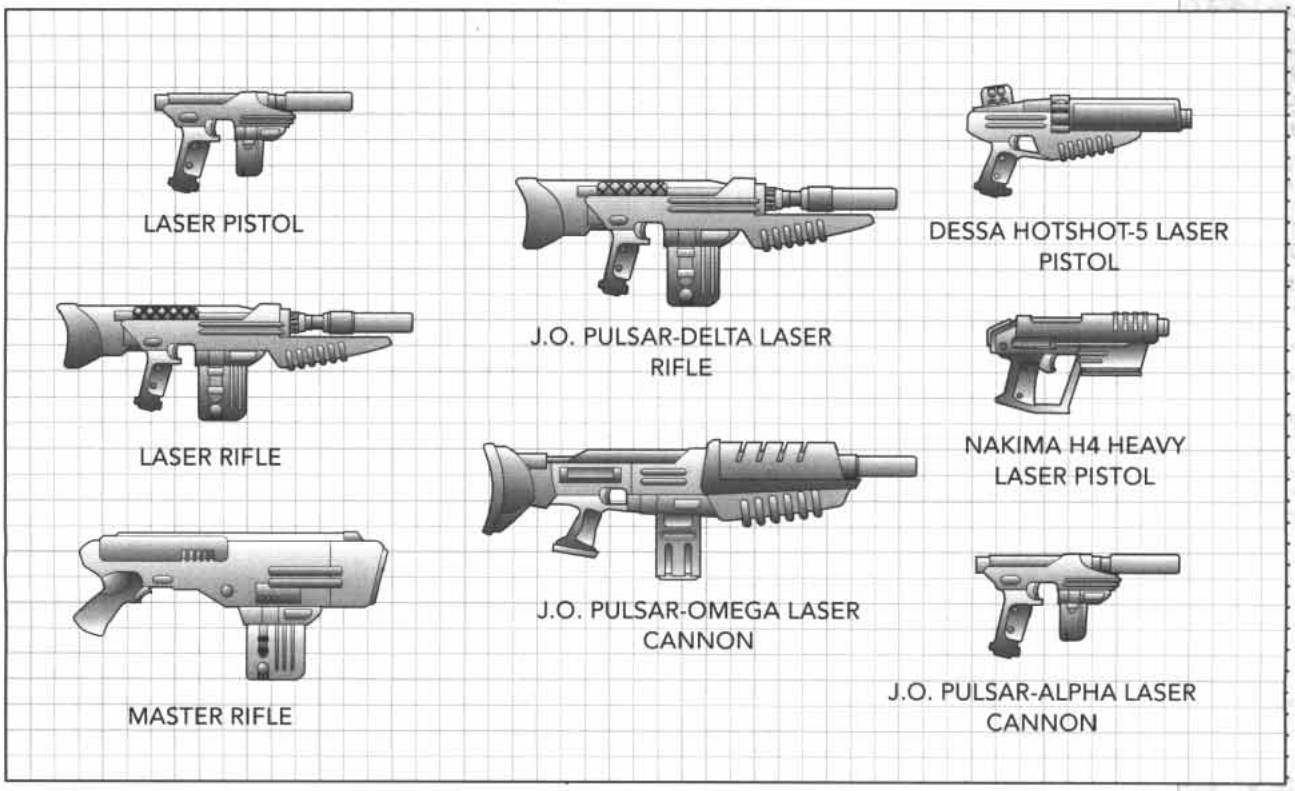
The laser has two energy settings of 2 and 5 power units; against non-reflec armor, the Armor Rating is halved. The sonic stunner has power settings of 1 to 10, each draining the corresponding amount of units.

Maser Pistol: This fires a short, intense beam of microwaves which fry the target. Their main advantage is that they bypass most types of armor; polymer or ceramic-based armor protect with only half of their value. Against metallic armors, the damage from a maser is transformed into an electrical attack whose Intensity is equal to half the weapon's Damage Multiplier plus the attacker's Margin of Success. Masers have fixed energy settings, which drain 2 energy units.

Maser Rifle: This gun is more accurate than maser pistols, but not really any more powerful. Like maser pistols, maser rifles have fixed energy settings of 2 units per shot.

BEAM WEAPONS

▶ Beam Weapons	ACC	DM	BR (m)	ROF	Ammo	Cost	Wt.
Laser Pistol	+1	x8/17/26	9	0	30	750/10	1
Laser Rifle	+1	x8/17/26/35/44	120	0	30	1,250/10	3.5
Sniper Laser	+1	x40	200	0	10	8,000/100	8
Maser Pistol	+1	x20	8	0	30	825/10	1
Maser Rifle	+1	x22	110	0	30	1,300/10	4
JO Pulsar-Alpha Laser Pistol	+1	x8/14/20	8	+1	60	1100/20	1
JO Pulsar-Delta Laser Rifle	+1	x13/22/35	100	+2	180	1900/25	3
Nakima H4 Heavy Laser Pistol	+1	x22/35	6	0	60	1500/20	1
Dessa Hotshot-5 Laser Pistol	+1	x10/16/22	8	0	60	1400/10	1
Walter-Stromm Police Special	+1	x6/14	8	0	60*	850/15	1.5



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NON-LETHAL GUNS

► Non-Lethal Weapons	ACC	DM	Base Range (m)	ROF	Ammo	Cost	Wt.
Taser	0	x3	4/8/16/32	0	30	60/10	0.5
Sonic Stunner	+1	See text	4/8/16/32	0	30	115/10	0.5

◇ NON-LETHAL RANGED WEAPONS

These weapons cause little actual damage to their target, but incapacitate them for short periods of time. The least restricted of all weapons, they are quite popular among ordinary civilians for self-protection.

Taser: This weapon fires a small electrically charged dart at the target. If the opponent is not wearing armor, he receives electrical damage equivalent to an Intensity 5 shock. No matter what the result, however, the victim will not suffer anything more than a Light Wound. When rolling for side effects, fatal results are ignored but the Margin of Success of the attack is added to the Intensity. Tasers use standard power packs.

Sonic Stunner: The stunner uses powerful focused subsonic waves to induce shock in its target. The victim of a sonic stunner must succeed in a BLD roll against the weapon's power setting plus the attacker's Margin of Success. A failed roll means the victim is stunned for a number of rounds equal to the Margin of Failure. On a Fumble, the victim is knocked uncounscious for a number of minutes equal to the MoF; roll a Health test against the Margin of Failure to avoid a permanent -1 to PER. Sonic stunners have power settings of 1 to 10, each draining the corresponding amount of energy units; they use standard power packs.

▼ HEAVY WEAPONS

Heavy weapons are designed to provide an infantry platoon's "punch." They are generally heavier, more cumbersome and a lot more expensive than standard weapons, and are thus assigned only in limited numbers. These bulky weapons must be braced and cannot effectively be used hand-held, except by very strong characters. These weapons use the Heavy Weapon Skill.

The proliferation of exo-suits and exo-armors requires that infantry and exo-suit forces carry heavy weapons. Not all heavy weapons can threaten exo-armor, but there are weapons that will make an exo pilot very cautious.

All heavy weapons are classified as military equipment for their exclusive use. The highly destructive nature of these weapons means that unless the weapon is in a proper transportation and storage case, and it remains there, Player Characters can expect problems not only from law enforcement officials, but anyone who knows they have a heavy weapon in their possession. (For example, ship captains will worry about a number of things, including hijacking and punctured hulls.)

Chaingun: This is a large, electrically driven multi-barrel cannon. It uses the same ammunition as a traditional machine gun but has a much higher rate of fire. However, it has a lower effective range because its barrels are shorter.

Light Mortar: This fires shells in an arcing, overhead trajectory. Unlike the mortars of old which required teams of highly trained crewmen, this light and portable weapon can be carried by a single trooper and deployed in mere seconds.

Anti-Armor Gun: This is a rocket-boosted cannon that is light enough to be carried by a strong infantryman. It has a fairly long range, but is best used in close quarters where it can punch through the skin of most lightly armored vehicles.

Nakima ALX-2 Assault Laser: is a shoulder-fired, anti-armor laser weapon. The ALX-2 is a single shot laser that is two parts: the emitter (a focusing and control unit) and the laser cartridge (a power pack and laser pulse generator). The laser cartridge is attached to the end of the emitter (a process that takes a little over ten seconds). The power transfer to the laser pulse generator happens extremely quickly when the weapon is fired. This completely burns out the laser cartridge, but generates a very powerful laser pulse. Firing the weapon is also hard on the focusing mechanisms, so the weapon is only good for about a dozen shots before it requires refurbishment. The range is keep quite short to maximize the laser's power over the entire effective range of the ALX-2. At roleplaying scale against non-reflec armor, halve the armor's normal Armor Rating.

"Even as a one-shot wonder, you can't do much better without an exo-suit. This means you have to mother your shots since you only get a few before the emitter wears out, and it's a slow reload. Even then there's nothing better to have on a boarding action."

— Private Tan Riko, JAF Marine

Jovian Optics Pulsar-Omega Laser Cannon: This is the equivalent of a laser machinegun. To minimize heat generated by the high power requirements, power is drawn from a special quad-sectioned power cell. The Omega uses two focusing mechanism-lasing chambers in combination to alternate the firing cycle, offering a further increase in the Omega's rate of fire. Two sections of the cell power feed to each lasing chamber.

The Pulsar-Omega has two standard damage settings, and a third special setting. Against non-reflec armor, halve the armor's normal Armor Rating. The first two settings drain 4 and 8 power units, respectively, and both settings are available at high rates of fire, though the second setting rapidly drains the non-standard power cell. The third Omega power setting is a "hotshot" setting that fires both chambers simultaneously. The "omega" setting has a Damage Modifier of x100 and drains 20 power units. Because the burst is split between the two lasing chambers-focusing mechanisms, it doesn't suffer the same performance degradation as the Dessa Hotshot-3. This feature has lead to a legal battle between Dessa and Jovian Optics over the "hotshot" option.

Hades Nemesis Man-Portable Particle Cannon: Hades Weaponry is an Earth-based company that managed to flourish in the conflicts of the Fall, and the reunification efforts of CEGA. Hades remains CEGA's primary suppliers of heavy weaponry to the Army. The Nemesis Man-Portable Particle Cannon (MPPC) is named for the ancient Greek god of revenge. Though man-portable particle weapons have some significant drawbacks, the benefits of low recoil and haywire effects balance the negatives.

The biggest drawback is the massive power requirements of the Nemesis. The weapon itself carries a fast charging/discharging capacitor to actually fire the weapon. To charge the capacitor, the user carries a backpack mounted microturbine generator that runs in a standby mode until the weapon is fired. The microturbine recharges the capacitor as quickly as possible. In game terms, this means the Nemesis MPPC can only be fired once every three turns. The generator carries sufficient fuel to fully charge the capacitor 12 times. If an exo-suit is available, technicians will mount the microturbine generator on the suit with an additional fuel reserve.

In addition to normal damage, the victim also suffers an Intensity 12 electrical attack plus the attacker's Margin of Success; against vehicles, this is equivalent to the Haywire characteristic. Energy dissipation effects increase at Long and Extreme ranges, reducing the Damage Modifier by 5 and 10 points respectively.

"It is difficult to conceive of a stronger moral indictment of CEGA than to simply point out their association with, and support of, the manufacturers of such lethal and barbaric weapons as were used to such murderous ends less than twenty-four hours ago."

— Press release from the Agora following a terrorist incident that involved the use of Nemesis MPPC against an ESWAT team

Ares Waffenfabrik GAC-2 Gyroc Cannon: Ares Waffenfabrik has invested large amounts of resources in gyroc weapons research. In addition to new gyroc autopistol and assault rifles, Ares has improved upon a poorly received version of an anti-armor gyroc cannon. A larger round, and more powerful propellant, give the gyroc cannon decided advantages over the 24mm anti-armor gun, including low recoil and greater range. The GAC-2 uses a 20-round drum magazine of two-stage gyroc projectiles (like all gyrocs, the first damage multiplier is for Short range as the projectile is still accelerating).

Hades Weaponry 30mm Rocket Launcher: The Hades Weaponry 30mm rocket launcher is a poor man's missile. The hypervelocity, unguided, folding-fin rockets are loaded into five round magazines. Because the rockets are unguided, a longer launch tube is needed to ensure a certain level of accuracy. So the length of the weapon doesn't hinder movement and storage, the forward section of the launch tube telescopes into a shorter storage and transport position that reduces the length to two-thirds of its two-meter length.

50mm Rocket Launcher: This is a light recoiless cannon, providing a heavy punch even against vehicles and fortifications. It is usually fired from the shoulder, but is also available as a tripod-mounted model.

HEAVY WEAPONS

▶ Heavy Weapons	ACC	DM	Base Range (m)	ROF	Ammo	Cost	Wt.
6mm Machinegun	0	x30	100	2	belt	1,800	7
7.5mm Machinegun	0	x32	125	3	belt	2,150	10
11mm Machinegun	0	x42	130	3	belt	3,600	15
9mm Chaingun	0	x30	50	4	belt	4,000	10
24mm Anti-Armor Gun	+1	x70	150	0	5	10,000	15
60mm Light Mortar	-1	x120	150 (see text)	0	5	5,000	12
50mm Rocket Launcher	0	x140	50	0	1	8,000	6
Nakima ALX-2 Assault Laser	+1	x150	60	0/2	1	8000/100	7
Pulsar-Omega Laser Cannon	+1	x25/35	75	+3	300	7500/100	12
Nemesis Particle Cannon	+1	x60+Elec.	100	0/3	15	15,000/100	25
GAC-2 Gyroc Cannon	+1	x50/80	170	0	20	12,000/150	14
30mm Rocket Launcher	0	x80	50	0	5	4000/150	10
"Armageddon Gun" (7.5mm)	0	x32	125	+3	500	4500/100	19

Hades Weaponry HA-IX "Armageddon Gun": The Hades Weaponry HA-IX (Heavy Assault) "Armageddon Gun" is a very heavy squad assault weapon. The HA-IX is an over-and-under 7.5mm machinegun and 40mm grenade launcher combination. The user must wear an exo-suit/skeleton or be exceptionally strong (BLD and STR +1 or greater) The weapons ammunition is carried in a pack-mounted magazine that carries both bullets and grenades. The rounds are linked together and feed to the weapon via a motorized feed mechanism. A special assault grenade round is carried for the launcher; a more powerful explosive in an improved shell (8/20 blast radius) provides increased effectiveness against hardened targets. This weapon is a favorite of CEGA assault troops.

"I can see why they call it the Armageddon Gun. I was watching from a ridge above this town when there was a skirmish between CEGA troops and a group of NAS mercenaries. The guys toting the AGs could have done the job single-handedly. What a slaughter."

— Comments made by Toby Friza to the media before his disappearance.

▼EXPLOSIVES & GRENADES

With the exception of Earth, where explosives are used to clear rubble left from the devastation of the Fall and skirmishes, explosives used in space are limited to weapons, mining, and some underground construction. Explosives remain an inexpensive choice for moving or loosening large volumes of rock and surface material. All legally manufactured commercial and military explosives include taggants — microscopic particles that are coded with a manufacturer identification code and lot number. When explosives do go missing, SolaPol and other intelligence agencies make tracking down the missing explosives a priority.

For safety reasons, all commercial explosives are immune to accidental detonation with exposure to flame — not always true of improvised or homemade types — to a minimum temperature (Fire Intensity 8) at which point they merely disintegrate Commercial explosives are also subject to minimum safe specifications for impact (100 points or greater Personal Scale Damage) and electrical (Electricity Intensity 4) sources.

Compared to a normal explosive charge, shaped explosive charges have two distinct areas of effect: a primary and a secondary. In both cases, the distance from the explosion the area of effect covers is the same; however, the shape of the two areas of effect are different. Whereas the normal charge affects a 360-degrees area around the explosion, the shaped charge's primary area of effect covers a small portion of that area (less than 45 degrees), while the shaped charge's secondary area of effect covers the remainder of the area.

Explosives that can be shaped have two Damage Multipliers listed. The first DM is for the direction of a shaped charge's primary area of effect. The second DM is for a shaped charge's secondary area of effect or the explosive as an unshaped charge. The first number listed for area is the radius of the shaped charge's primary and secondary area of effect. The second area of effect is for a normal charge. The area of effect multiplier for large shaped charges is half of the normal multiplier.

Compound C5: Compound C5 is a descendant of C4, a plastic explosive used during the late 20th and early 21st century. This explosive is used extensively in demolition work since it can be easily shaped to fit the application. Since C5 is more easily available for commercial sale, it has also become the explosive of choice for terrorist organizations.

Dynamite and Dynamite-II: Dynamite is still a the workhorse of commercial explosives, but in its reincarnation as Dynamite-II. Advances in chemistry have increased the detonating force and stability of Dynamite-II through various means. Dynamite's primary use is in mining and construction. The relative ease with which the original dynamite can be manufactured means it is one of the explosives more commonly used by "poor" terrorist organizations.

Detonating Cord: This is a high velocity explosive in the form of a half centimeter diameter cord. Called detcord for short, it is used for initiating large explosive loads, and as a cutting or breaching charge for low density materials. It is available in spools 100 meters long. Detonating cord is made by a number of companies in the solar system. The statistics listed under the Explosives and Grenades table are per meter length of cord.

Home-Made Explosives: Explosives are easily manufactured with simple to moderately sophisticated chemical synthesis equipment that can often be put together using life support equipment spare parts. The chemicals required for most stable explosives are strictly regulated and sold only to approved and licensed buyers that require them for other lawful purposes. Less powerful explosives can be manufactured with more common and unregulated chemicals, however. Disappearances of chemistry equipment and chemicals are always promptly reported by companies due to the threat an explosion in space represents, and almost universal laws that require the reporting of any theft of, or missing, chemicals or equipment that may be used to manufacture explosives.

In either case, there is always a chance that something will not work properly — explosive material can be very unstable, especially when manipulated by improperly trained personnel with cobbled-together equipment. The proper reactions may not occur, rendering the explosives useless, or may go off prematurely, with devastating consequences. Without the right chemical processing equipment, uncontrolled reactions and side reactions are a very real danger.

Satchel Charges: Satchel charges are designed for demolitions and sapping. They carry a shaped charge to be placed against the target, moving or still. When properly placed with the shaped charge facing the target, a satchel charge has a Damage Modifier is x150 (x15 vehicle scale). Improper placement, or anything on the opposite side from the shaped charge's direction of effect, is attacked with an effective Damage Modifier of x75 (x7 vehicle scale).

XDX: This is the standard explosive charge used in military missile warheads. While quite powerful as a normal charge, XDX exhibits premier explosive properties when cast in a shaped charge, which makes it very attractive to the military. These properties also make it highly sought after by mercenaries and terrorists. While SolaPol is ever vigilant in tracking down stolen or missing explosive stores, the fact XDX is an exclusively military explosive means XDX can be recovered from combat salvage or unexploded missiles for sale on the black market. The price list under the Explosives and Grenades table is the black market value of one kilogram of XDX.

◇ GRENADES

Grenades are small, explosive weapons which are either thrown or shot at their target. Although a lot of variations exist as far as the type and power of particular grenades are concerned, most of them fall in a few definite categories as detailed below (see CORE Rules section 3.4.4).

Most grenades do more than simple concussion damage (fragmentation, incendiary, or gas). The Secondary Damage Multiplier indicates the intensity of this second attack, while the weapon's description explains the nature and game mechanics related to this additional damage. Anyone in the primary radius will suffer both the effects of the concussion and any secondary effects which might be inflicted by the grenade.

Grenades which have multiple types of secondary damage are possible, but very expensive and usually redundant. A grenade with both fragmentation and nerve gas is likely to achieve the same final result (i.e. dead people) as a grenade with either charge. The use of a large radius of one effect combined with a small radius of another, however, can be useful in some situations.

Grenade Launcher: These are used to shoot grenades at a specific target; their accuracy is considerably less than other weapons, but they can fire indirectly. Some models of grenade launchers can be slung under the barrel of any type of rifle.

Concussion Grenades: These are simply explosive charges encased in a plastic casing, which is vaporized by the explosion. They are considered "offensive" grenades, because they can be thrown further than the explosion radius. Normal concussion grenades are often used in urban combat situations because they can quickly neutralize enemy infantry and also cause damage to vehicles and installations. The effects of a grenade detonating in an enclosed space are both devastating and gruesome. Concussion grenades with a very high Damage Multiplier can be used effectively against vehicles, and are called Anti-tank or Anti-armor grenades.

Fragmentation Grenades: These do additional damage by scattering small shards of metal or ceramic over a wide area. Anyone caught in the secondary area of effect takes the result of one die multiplied by the secondary Damage Multiplier. The secondary Damage Multiplier is applied at full strength against humans, but only at half strength versus vehicles.

Incendiary Grenades: These carry an additional charge of fast-burning chemicals. Fire damage is applied to anyone within the secondary area of effect, with an Intensity equal to the secondary Damage Multiplier. Some incendiary grenades may have a Burn Duration and will continue to do damage for the number of rounds stated unless the burning substance is somehow neutralized.

Flash Grenades: These do little actual damage, but disable targets with a very bright magnesium flash and loud bang. Anyone inside the secondary area of effect must make a Health roll against a Threshold equal to half the maximum secondary area of effect, minus the distance to the grenade's point of impact. For example, a character 12 meters away from a grenade with a secondary area of effect of 30 would have to roll against a Threshold of ([30-12]/2), or 9. A failed roll incapacitates (-4 to all rolls) for a number of combat rounds equal to the Margin of Failure.

Gas Grenades: These subject everyone within the secondary radius to the effects of a particular gas, which is treated like a drug or toxin. They come in many different varieties, the most common being Tear Gas and Nerve Gas, but smoke is a non-lethal alternative sometimes used for defensive actions. If there is a strong wind, it is possible that the secondary radius may be somewhat elliptical, and Gamemasters can rule how this works according to the situation. Similarly, in an extremely strong wind, it is possible that the secondary radius will be effectively neutralized due to the near-instantaneous dispersal of the gas.

Tear gas incapacitates by attacking the victim's respiratory system and mucous membranes (eyes, nose and mouth). A Health test is made against the gas' Potency (usually between 6 and 10); a Margin of Failure between 1 and 4 means an equivalent negative action modifier due to pain and blurred vision; this penalty will lessen by 1 for every minute spent outside of the gas. A MoF between 5 and 9 will incur a -4 action penalty, which will lessen by 1 every hour removed from the gas. A MoF of 10 or more will, in addition to the other effects, cause damage to the character as a fatal toxin of a Potency seven points lower than the Potency of the tear gas; a fumble is equal to a Margin of Failure of 9.

Nerve gas grenades disperse a fatal neural toxin gas in its secondary area of effect, and usually have a Potency situated between 7 and 15. All targets in the secondary area of effect are subjected to the toxin's effect.

Smoke gas grenades usually have a very small primary radius which inflicts little damage, and a large secondary radius. The volume covered by the secondary radius is considered to be very poorly lit and imposes a -2 penalty to any ranged skill use. These are excellent devices for use in both attack or retreat actions since they are extremely effective at hiding the locations of people in the smoke. Unfortunately, when improperly used, they serve only to confuse matters for both sides. It is also possible to manufacture grenades that use "hot smoke"— a type of smoke-producing chemicals that burn at higher temperatures — for double the cost of regular smoke grenades. These block not only the visual line of sight, but also impair the functioning of infrared sensors.

Maser Grenade: Maser grenades use a microwave pulse, instead of explosives and shrapnel, to inflict damage. When the maser grenade impacts, it uses the weighted bottom (the high-density power cell) and a tiny gyroscope to orientate the microwave emitter into a vertical position. The emitter covers a spherical area within a ten-meter radius to within a few centimeters of ground level.

EXPLOSIVES & GRENADES

Type	ACC	DM	Base Range (m)	Area[1]	Cost	Wt
▶ Non-Lethal WeaponsExplosive Compounds						
Compound C5	0	x70/40	n/a	2/5	75	1
Dynamite	0	x28	n/a	2	20	1
Dynamite-II	0	x36	n/a	3	30	1
Detonating Cord	0	x25	n/a	1	10	0.1
Satchel Charge	0	x150/70	n/a	2/-	1500	3
XDX	0	x100/55	n/a	4/6	2000	1
▶ Non-Lethal WeaponsGrenade Launchers[2]						
40mm Underbarrel Launcher	-1	grenade	40	1	250	1.5
40mm Grenade Rifle	0	grenade	50	5	700	4
▶ Non-Lethal WeaponsGrenades[3]						
Concussion Grenade	0	x30	Throw	9	12	0.5
Fragmentation Grenade	0	x26/14	Throw	8/30	10	0.5
Incendiary Grenade	0	x24/8	Throw	8/12	12	1
Flash Grenade	0	x8/flash	Throw	3/30	8	0.5
Tear Gas Grenade	0	x5/gas	Throw	2/15	8	1
Nerve Gas Grenade	0	x5/gas	Throw	2/15	15	1
Smoke Gas Grenade	0	x2/smoke	Throw	1/30	4	0.5
Maser Grenade	0	x20+Electr.	Throw	10	30	1
Night Glue Grenade	0	See text	Throw	10	20	1
Glue Solvent	n/a	See text	n/a	n/a	5	0.5

[1]Area indicates the radius in meters of the particular grenade's area of effect. The first number is the primary area of effect, used for concussion damage; the second number, if any, determines the secondary area of effect.

[2]DM and Area of Effect equal to Grenade type. Indirect fire, Minimum Range equals half weapon's Base Range.

[3]Note: When calculating the cost of a grenade with more than one secondary effect, multiply the cost of the most expensive secondary effect with three quarters of the price of the second most expensive effect, plus half the price of each (if any) successive effect.

Their main advantage is that they bypass most types of armor; polymer or composite-based armor protect with only half of their value. Against metallic armor, the damage of the maser grenade is transformed into an electrical attack whose Intensity is equal to half of the grenade's Damage Multiplier plus the attacker's Margin of Success.

Night Glue Grenade: The night glue grenade is a non-lethal grenade that with an interesting effect — everything gets stuck together. The glue is a black contact adhesive that contains a strong irritant and blocks a broad range of the visible and non-visible light spectrum, hence the "night" designation. Everything coated by the glue is turned black and deprived of sight. This means equipment and optics are rendered useless, and people that move or touch anything become stuck. The irritant is meant to ensure that persons react to it and become stuck as they attempt to remove the compound. Trying to clean the glue off of equipment achieves similar results.

Police or military personnel entering the scene spray a release solvent before them to avoid sticking to things. People are released by selective spraying of the solvent. Trying to unstick glued flesh is not advisable, but it is possible. A successful Strength Test against a Threshold of 5 will free the person, but also inflicts an automatic Flesh Wound as skin is torn from the body. Regular clothing that is stuck will likely tear first, and armor isn't damaged by pulling it apart, but the chances are that whatever is freed will get stuck to something else. Exo-suits have the strength and protection to simply pull themselves free, but any sensors will be fouled by the glue, leaving the exo-suit blind.

Grenade Rifle: Rifle grenades are the poor man's grenade launcher. Using blank rounds in a chemical slugthrower rifle, the firing gases propel the rifle grenade off a special adapter attached to the barrel. The damage and area of effect are equivalent to the grenade type. The rifle grenade's range is equal to half of the rifle's normal range values. A standard grenade cannot be launched from a rifle adapter.

◇ EXPLOSIVES IN QUANTITY

Damage from large explosions comes as much from secondary effects like the seismic disturbance and sympathetic reactions. Flying glass and debris from an explosion is often just as deadly as the explosive itself. A building that loses a supporting wall can drag itself down under the weight of unsupported floors and their contents. Loose power cables spark, setting fire to flammable materials. Gamemasters should be sure to take into consideration the location of any explosion.

Explosives inflict damage because of the shockwave the explosion produces. By detonating more explosives, it is possible to increase both the force of the shockwave, and the range it can carry. For each power of two increase in the amount of explosive, multiply the area of effect by the power of two. There is also a small increase in the damage inflicted by a large explosion. The Margin of Success for a large explosion is increased by one for every threefold increase (divided by three, round toward zero) in the area of effect. For example, 150 kg bomb of C5 (see below) is detonated by a terrorist organization. The area of effect is multiplied by seven (bomb mass closest to 27 = 128), so everything within 35 meters is attacked. The terrorist Margin of Success is increased by 2 (7 / 3 = 2.333, rounded toward zero). Anything up to double the modified area of affect suffers half damage.

Bomb Disposal Suits: These are heavy and bulky to wear; however, the hands are left completely free to perform fine manipulations. This imposes a -3 penalty on any "physical" activities with the exception of any task that uses the hands. The suit has a frontal Armor Rating of 100, a rear Armor Rating of 10, and comes with a helmet. A bomb disposal suit costs 4000 credits.

Bomb Disposal Tanks: These are large metal and composite spheres that are designed to absorb the force of an explosion. The interior of the sphere is a special polymer and ceramic material that pulverizes to absorb the force of an explosion. The exterior metal and composite casing contains the explosion without fragmenting.

Explosives Kit: These contains everything needed to setup and detonate, or deactivate, an explosive device: detonators, blasting caps, tools, timers, switches, batteries, fuses, wire, primer, and boosters. Any attempt to set or deactivate an explosive charge without the proper explosives kit imposes a -2 modifier.

▼ SPECIAL AMMUNITION

Special ammunition is only available for ballistic-type weapons, with a single exception for energy weapons. While slugthrowers have some severe disadvantages compared to their high tech equivalents, special ammunition types can only partially overcome some of those flaws. For the sake of simplicity, a clip should only carry a a single type of ammunition.

Armor Piercing: Armor piercing rounds are specially designed to penetrate armor by one of two means: discarded sabot round or sub-round. Sabot rounds are a high-density dart with a collar that falls away once the round leaves the weapon's barrel. Sub-rounds looks like normal rounds except that the casing is a soft material that surrounds a penetrator rod; in this manner, the penetrator continues to travel into the target while the soft casing is shed on the armor's surface. Armor protects with only half of its normal Armor Rating against AP rounds. Armor piercing rounds are only available for chemical slugthrowers.

Boosted Ammunition: There are two types of boosted ammunition: range and damage. Range boosted ammunition combines a lighter bullet or a more powerful propellant, or both, to increase the range of the round. Damage boosted ammunition is manufactured using one of two methods: increasing the round's density or using an shaped explosive charge. Either method provides a significant increase in the round's damage potential. Boosted ammunition is only available for chemical slugthrowers.

Caseless: Caseless ammunition increases the number of rounds carried in a magazine or clip by eliminating bulky metal casings. Technological advances have reduced the chances of misfires due to propellant deterioration, heat sensitivity, or moisture. Casless ammunition increases the effective magazine size by 25% (multiply listed Ammo by 1.25). Caseless ammunition is only available for chemical slugthrowers.

Energy-Homing: Energy-homing rounds are guided by the strong energy emissions of enemy communication and electronic warfare equipment. If the target made an Active Sensor roll, used communications or has any kind of ECM or ECCM active during the combat round when the energy-homing round is fired, the weapon gains a +1 to-hit. Energy-homing rounds are available for missiles and mortars only.

Flechette: Flechette rounds are an alternate ammunition for shotguns. Instead of pellets, a cloud of hardened metal darts is fired. The protective value of body armor is not doubled against flechette rounds (as it normally is against pellets). Only shotguns may fire flechette rounds.

Guided: Guided ammunition has the ability to home in on targets "tagged" by a friendly unit with a target designator. This allows the round to correct its course to the target mid-flight. Once the target is "tagged" by a friendly target designator, the round gains a +2 to-hit modifier. Guided ammunition is available for missiles and mortars only.

High-Capacity Power Cells: High-capacity power cells are available for most energy weapons; however, they are heavily restricted. They increase normal power cell energy units by 50%, and they are twice the normal cost. On a Fumble, there is a chance the cell will surge, destroying the cell and possibly shorting out the weapon. (Roll 1d6: a result of 6 means the weapon shorts out, rendering it useless. GM's discretion if it can be repaired.) High capacity power cells are only available for energy weapons.

Incendiary: Incendiary rounds carry a chemical component that ignites upon impact. In addition to normal impact damage, the target also suffers an Intensity 6 fire attack that burns for two rounds; missiles and mortars attack at Intensity 10 for 5 rounds, but have their Damage Multiplier halved. Incendiary rounds are available for all ballistic weapons.

Low-Velocity: Low-velocity ammunition uses a less powerful propellant charge to decrease the power of the round. This reduces both its killing power and its penetration. Low-velocity rounds are only available for chemical slugthrowers.

Recoilless: Recoilless ammunition is best described as a poor man's gyroc round. The smaller caliber of non-gyroc weapons reduces the damage and range compared to normal slugthrower rounds. The tradeoffs of range and damage compared to negligible recoil, decreased firing signature, and reduced likelihood of damaging important systems is considered acceptable. Recoilless rounds are only available for chemical slugthrowers.

Stun: Stun ammunition uses a thermo-kinetic sensitive mechanism to generate an electrical charge. The round is less dense than normal ammo, so the impact damage is significantly less. If the opponent is not wearing armor, he receives an Intensity 3 electrical shock; the victim will not suffer more than a Flesh Wound, no matter the result. When rolling side effects, fatal results are ignored but the Margin of Success is added to the Intensity. Stun rounds are only available for chemical slugthrowers.

Tracer: Tracer rounds are only available for chemical slugthrowers. When a tracer round is fired, it leaves a visible streak of light. Knowing where the bullets are going, the attacker can "walk" the bullets onto the target. In game terms, using tracer rounds adds a +1 to-hit bonus per 2 points of Rate of Fire used. This only applies when the attacker can see where the bullets are going. (i.e. If the shooter is blinded or shoots blind around a corner, the bonus does not apply.) The Damage Modifier is also affected slightly to reflect lowering the shell mass for tracer chemicals.

OGL: SPECIAL AMMUNITION

To use the specialty ammo in OGL-statted weapons, simply apply the modifier "as is" to the stats. For example, a rifle will do 20% more damage per hit — apply the multiplier after rolling the damage, rounding down. Apply the Base Range multiplier to the Range Increment before checking for distance. Multiply any bonus to hit by 3 (i.e, a +1 becomes a +3).

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SPECIAL AMMUNITION

▶ Non-Lethal WeaponsAmmunition	ACC	DM*	Base Range*		Ammo*	Cost*
Boosted, Range	n/a	x0.8	x1.4	n/a	x20	
Boosted, Damage	n/a	x1.2	x0.8	n/a	x15	
Caseless	n/a	n/a	n/a	x1.25	x5	
EM Homing	special	n/a	n/a	n/a	x10	
Flechette	n/a	n/a	n/a	n/a	x15	
Guided	special	n/a	n/a	n/a	x20	
HC Power Cell	n/a	n/a	n/a	x1.5	x5	
Incendiary	n/a	spec.+fire	n/a	n/a	x10	
Low-velocity	n/a	x0.75	x0.75	n/a	x5	
Recoilless	n/a	x0.5	x0.5	n/a	x5	
Stun	n/a	x0.1+elec.	n/a	n/a	x5	
Tracer	special	-3†	n/a	n/a	x5	

* Multiple by modifier and round off to nearest whole number.

† Subtract from normal weapon Damage Multiplier.

▼ WEAPON ACCESSORIES

For those people that are not completely satisfied with a weapon's base characteristics, certain accessories can make a weapon that special something to the owner. Most accessories listed here are performance-oriented, since most other changes are either a case of asthetics or personal preference in ergonomics.

Silencers: Silencers are specifically designed to quiet the loud retort of chemical slugthrowers, and are available for pistols and rifles. Silencers are available in two varieties: physical and electronic. The physical silencer is a baffled tube that is attached to the muzzle of the weapon, and has the added advantage of hiding the slugthrower's muzzle flash. Electronic silencers mount an omnidirectional speaker that broadcasts black noise to cancel the noise of the weapon, but they do not block muzzle flash. In both cases, the noise is reduced to the level of a quiet finger-snap.

Mirage Electro-Optical Sights: Visionary Systems produces the Mirage Electro-Optical sight system for personal and military weapons. The basic Mirage is a telescopic sight that uses lenses grown in zero gravity to ensure optimal clarity and zero defects. In addition to the basic optical sight, three separate vision options, or any combination thereof, are available for added functionality: low light, ultraviolet, and infrared. In each case, the only visible addition to the basic telescopic sight is a narrow rectangular-shape on the top of the sight. Mirage EO sights are designated with the first letter of their added capability, to differentiate the different models. For example the Mirage-U is an ultraviolet sight, while the Mirage-ILU has all three sight options. In all cases, the sight system adds a +1 modifier to hit at Long and Extreme range.

Visionary Systems electro-optical sight systems use a special "flicker" mirror to allow direct vision, but at the same time they are directing the full light spectrum into the processing unit mounted on the top of the sight. The electronics process the image, according to the vision option they are designed for, before projecting a transparent false-color image onto the rear lens with a laser. Both the ultraviolet and infrared sight are equipped with a broad-beam laser — of the appropriate type — to increase the natural illumination for increased clarity. This does have its drawbacks, since it can be used to locate the sight's user via a passive UV or IR sight.

Maelstrom Pinpoint Laser Sight: The ME Pinpoint Laser Sight is a small tube that mounts on the top of a pistol. The sight provides a +1 to-hit modifier at Short and Medium ranges. The ballistics of slugthrower pistols make the sight useless for longer-range shooting. Since laser pistols already benefit from a built-in system (the laser at low power), they cannot gain an additional bonus with the Pinpoint Laser Sight.

Maelstrom True-Sight Smart Sight: A smart sight combines a processor with a microwave rangefinder/motion sensor and several small gyroscopes to account for changing range and the motion of the attacker and target. Low light and infrared vision are also part of the system. The True-Sight uses a small display screen to show a magnified and enhanced

view of the target. Range and relative target motion are displayed with a point that shows where the round will strike when the weapon is fired. The True-Sight makes a weapon as close to point and shot as ever was possible.

The sight's ability grants the attacker a +2 bonus per round of aiming instead of the normal +1 bonus; however, the weapon must be sighted properly beforehand to ensure its accuracy. Before a character can use the +2 bonus, he must spend two hours at a range to adjust the sight. After spending these two hours, the character must make a Small Arms test against a Threshold of 4. If the test is failed, the character uses the normal +1 aiming bonus; if the test is fumbled, the character loses all aiming bonuses until the sight is readjusted. Any hard jolt, weapon modification, or lack of use requires the True-Sight to be readjusted. Maelstrom Electronic's True-Sight™ Smart Targeter was the first smart sight produced. Since then a number of inner system companies have produced their own copies with various degrees of success.

Stabilizers: Stabilizers are designed to compensate for weapon recoil and movement. The simplest chemical slugthrower stabilizer is the muzzle brake. Vents are added to the end of the barrel to redirect some of the firing gases. Gas recoil stabilizers effectively reduce the weapons recoil by directing firing gases into a cylinder. Both methods effectively reduce the slugthrower's recoil by half, making it much easier to handle.

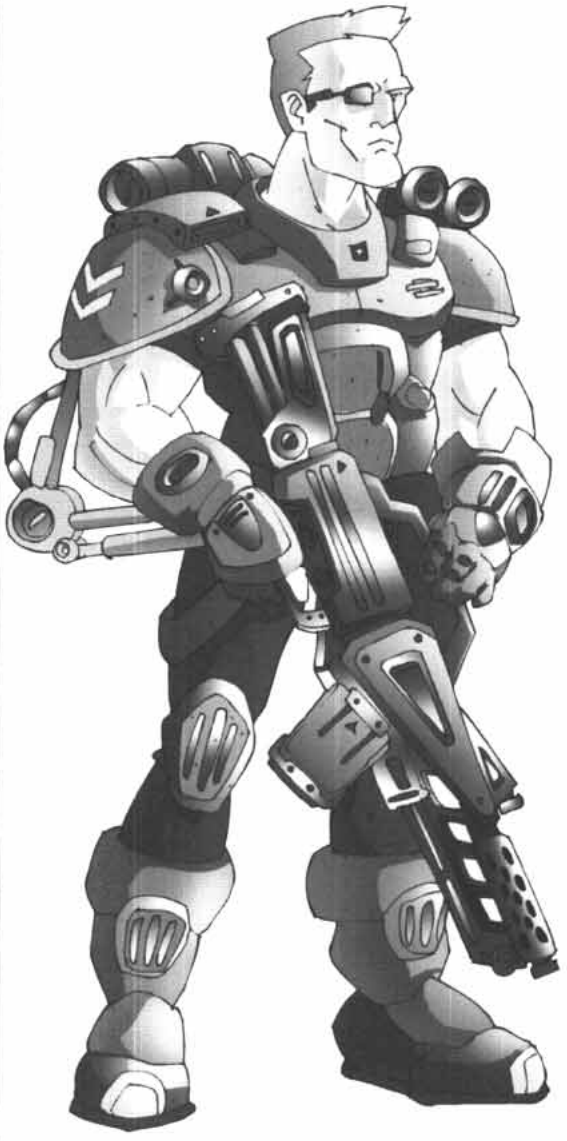
Gyroscopic stabilizers effectively reduce all horizontal and vertical forces acting on the gun. While it does cancel out much of the weapons motion, it means that rapidly moving the weapon up/down or left/right while firing is near impossible. The wielder cannot use Walking Fire unless the gyro stabilizer is turned off. When a burst is used against a relatively stationary target (walking or slower), the attacker receives a +1 modifier to hit. The gyroscopic stabilizer is attached to the underside of the barrel of any rifle-sized weapon or larger.

Sidearm Holsters: The ubiquitous holster for carrying a sidearm comes in numerous varieties, depending on the individual's need for accessibility or concealability. Ankle holsters carry the weapon around the ankle. Waist holsters carry the weapon at the lower back. Hip holsters are carried at the hip. Wrist holsters carry small pistols (one kilogram or less) at the wrist. Quickdraw holsters are carried low on the thigh. Shoulder holsters are carried under the arm along the side of the chest. There are also a couple of interesting holster variations.

The forward draw holster is a low hip holster that allows the weapon to be drawn out of the front of the holster. Carried with the weapon's grip at arm's length down the thigh, the forward draw holster allows the user to bring the weapon, and the arm, into a firing position with one quick motion. (There is no need to lift it out of the holster.) Since the front of the holster is ëopen,' a safety strap keeps the weapon secure in the holster until released. Once the strap is released, the holster, custom fitted to the weapon, uses friction to keep the weapon in its place until drawn.

Snap draw holsters attach to the lower arm, and are activated by a quick muscle action. The motion releases a spring-loaded mechanism to extend the attached small pistol into a position easy to grasp. This requires the user to wear loose clothing around the wrist and forearm to accommodate the use of the holster. Snap draw holsters are named for the distinct snapping sound they make when extending.

Harness System: Harness systems are a step-down from the heavy weapon exo-skeleton (below). The system consists of the torso harness (a composite vest that supports the weapon's weight) and weapon support arm (which transfers the weight to the torso). The support arm uses a feedback system and actuators to assist the user in moving the attached weapon. With the weight of the weapon carried by the torso, the user can effective move the weapon as though it has zero mass. Ammunition can be attached to the back of the torso harness. The harness also has several gyroscopes to help keep the user balanced.



Heavy Weapon Exo-Skeleton: In most of the solar system, the expense of a full exo-suit, and the training that is required to use it, is the domain of special operations, space-based marines, and ESWAT teams. Standard tactical doctrine still requires some heavy weapon support for infantry. The heavy weapon exo-skeleton is issued to regular infantry units to provide increased stability and mobility for the user of the squad's heavy weapon. The exo-skeleton is semi-enclosed to protect the user since he cannot wear standard body armor. To get into the exo-skeleton, the wearer steps back into the suit while placing their arms in to the skeleton's arms and gauntlets. The front panels are then closed along the outside edge of the skeleton.

In game terms, the exo-skeleton is effectively Maneuver 0. It does not increase the wearer's movement rate nor influence the accuracy of any weapon carried, but it gives the wearer an effective Strength of +2. (If the character has a STR of 2 or higher, they gain no benefit to their STR.) Because of the ablative-coated plate armor, the exo-skeleton has an effective Armor Rating of 30.

WEAPON ACCESSORIES

Type	Wt.	Cost
Silencer, Pistol	0.5	50
Silencer, Rifle	1	75
Visionary Systems Mirage EO Sight	0.5	750
Infrared	-	+250
Low Light	-	+150
Ultraviolet	-	+250
ME Pinpoint Laser Sight	0.2	200
ME True-Sight(TM) Smart Sight	1	1500
Muzzle Brake	0.1	30
Gas Recoil Cylinder	1	80
Gyro Stabilizer	1	150
Holster, Hip	0.25	15
Holster, Waist	0.25	15
Holster, Shoulder	0.5	25
Holster, Quickdraw	0.5	20
Holster, Forward Draw	0.5	30
Holster, Snap Draw	0.5	50
Harness System	14	1500
Heavy Weapon Exo-Skeleton	40	3500

▶ DEFENSIVE SYSTEMS

These systems are employed almost exclusively on Earth and Mars. Since they are the only locations involving "active" ground warfare, these systems are used at key points in a defensive line or to defend important facilities. Because of their cost and weight, these systems protect fixed installations and defensive positions from attack.

While all colony cylinders, stations and commercial vessels are equipped with basic screens and point defense system for protection from space debris and particles, these units are sometimes mounted externally to provide additional protection against agression. With the increasing number of conflicts between solar powers and an increased threat from pirates and privateers, many independent captains are installing anti-missile systems on their ship's hull for protection against missile attack and boarding parties. Colony cylinders and stations are mounting both of these systems for the same reasons.

Anti-Missile System: Available as a ballistic or laser system, the semi-portable anti-missile system is used to protect defensive positions from missile attacks. Operating either version of the system is easy. The controller does not actually choose targets or give the order to fire. He holds onto two "deadman" switches. While even one switch is held, the system is safed. The threat of attack is indicated on the control panel, and the person holding the switches releases them. The system automatically begins to engage any incoming targets according to its fire control algorithms.

The laser system uses ladar (laser-based radar) for targeting, while the ballistic system uses Doppler microwave radar. Only targets moving toward the system are targeted, so return missile fire by friendly units is not shot down. The laser anti-missile system is usually employed where it can plug into a larger power supply.

Anti-Laser Aerosol: Anti-laser aerosol systems are relatively uncommon on the ground since it is far cheaper to employ ballistic weapons on Earth and Mars.The central anti-laser system is a reactive defense system that launches canisters of anti-laser gases from a central location. Detectors placed withing the system's effective radius determine the direction of the attack and fire a pattern of canisters to intercept the beams.

The perimeter version uses multiple detectors along a webbed layout of tubes equipped to spray jets of pressurized aerosol into the path of a laser. The system is very low profile, and can be easily camouflaged; however, it is very vulnerable to damage by ground vehicles and artillery attacks.

▼ ARMOR

When people become engaged in violent activities, they get hurt. Armor, of some form, has become the normal means of protecting one's person from that violence. Some advanced forms of armor are available, but these suits of armor are rather hard to find as they are usually very expensive and/or illegal,. The military and police forces have some access to this kind of technology, but the prohibitive cost of high tech armor always makes them scarce. There are also some methods which allow for greater utility of existing armor types. In any case, personal preference and money are the deciding factor to determine just how safe a person can be when violence erupts.

Low tech armors: are simply protective suits, without any computerized gadgets. The weights and costs given are for full body suits; for armors that protect the torso only, divide both the cost and the weight by half. Except for composite armor, these are normally used when people do not have access to more advanced forms of protection. Nomads and pirates often wear these items.

DEFENSIVE SYSTEMS

▶ System*	Arc	DM	BR (hex)	ACC	ROF	Ammo	Special	Wt	Cost
Ballistic Anti-Missile	T	x2	1/2/4/8	0	+6	600	AM, Defensive, Smart2	1200	120,000
Laser Anti-Missile	T	x2	1/2/4/8	+1	+4	400	AM, Defensive, HEAT, Smart2	800	160,000
Central Anti-Laser	T	0	0/1/2/4	-1	+3	150	AE0, Aerosol, Defensive, Smart2	500	250,000
Perimeter Anti-Laser	T	0	0/0/0/0	0	0	50	AE1, Aerosol, Defensive, Smart2	400	200,000

*Note: These systems were created with the Silhouette Vehicle Construction System. To convert to human scale suitable for roleplaying, multiply the Damage Multiplier by 10 and the ranges by 50.

ProTech Inc. Clothing: ProTech Inc. is based in the Orbitals, and manufacturing protective clothing is their primary business. The clothing carries inserts of Duraweave and ablative reflec. Duraweave is the same material in duraplast mail and shell armors formed in strands, and then woven into flexible plates that are less bulky than mail or shell duraplast. Ablative reflec is a flexible, polymer-like material, coated to the outer side of the duraweave, that vaporizes under laser fire to dissipate and diffuse the laser energy. The clothing is, essentially, meant to be layered to increase its protective value. The only exception is wearing a ProTech long coat over a ProTech jacket, which imposes a -1 Encumbrance penalty to the wearer.

ProTech clothing is often worn by law enforcement officers on patrol. SolaPol's Executive Protection Bureau agents often wear ProTech clothing, and they have been known to make their charges wear it too (they always ask nicely.) VIPs from across the solar system are regular customers of ProTech, as is anyone concerned about their personal safety with the credits to spend. The upper and lower body suits are custom-fitted to wear beneath regular clothing.

Custom clothing incorporating duraweave and ablative reflec is also available from ProTech in the latest fashions from top designers. Incorporating the duraweave and ablative reflect into existing clothing costs three times the listed ProTech clothing equivalent piece. For example, a tuxedo refit is the equivalent of a ProTech jacket and pants. So the final refit cost is three times a ProTech jacket and pants, plus the tuxedo.

Helmets: The armors listed here are considered complete suits, but they don't include helmets. To purchase a helmet for the corresponding type of armor, multiply the Armor Rating and cost of the armor type by the modifier list in the Armor table. The Code for the helmet is the same as the armor type. It is possible to wear a helmet of a different type than the body armor.

Partial Armor: It is possible to buy some armor as partial sets, and sometimes that is all that is available. Depending on the type of armor, the level and cost of protection will vary. To find the level of protection, multiply the Armor Rating of the full armor suit by the indicated multiplier in the Armor table below. The same method is used to determine the weight and cost. If the character wears only the armor torso, or torso and arms, of any armor type with encumbrance, reduce the encumbrance by one. The method described here is rather simplistic, so Players and GMs can decide if they want to create a more complex system. The Code for any partial armor lowers the Availability Threshold by one or two points for the armor type.

Duraplast Mail: Duraplast is the generic name for a synthetic compound whose hardness and flexibility surpasses those of cold steel, at a fraction of the weight. It is often made into a modern version of chain mail, in which little rings of duraplast are interwoven to make a resilient yet flexible shirt.

Durashell Armor: Durashell is the name given to full suits of molded composite antiballistic plates. A durashell armor suit is bulky and must be worn on top of one's clothes (usually a light body suit), but provides the best all-around protection short of an exo-suit. They are usually custom-tailored for their wearer; characters wearing a durashell armor made for someone else receive an additional -1 penalty to "physical" Skills. This applies for full body suits only — wearing someone else's durashell torso armor does not incur any penalty. The cost given for a full durashell body suit does not include the tailoring, which costs an additional 10%.

Reflec Armor: Reflec armor is a light, reflective suit that protects against lasers; its surface diffracts and disperses some of the energy carried by laser beams, but also makes the wearer easier to spot (-2 to Stealth Skill tests). Reflective armor is practically useless against physical attacks, but does stop some of the damage from maser beams (use half the listed value). Any other kind of armor can be made into relective armor as well; add 20% to the armor's cost and use the listed value for normal reflective armor against laser attacks.

Interference Screen: This light suit protects against maser attacks by dephasing and diffusing the strong microwaves emitted by the weapons. It is useless against any other kind of physical or energy attacks. An interference screen can be added to any type of armor for an additional 25% of that armor's cost.

Assault Shield: Assault shields are used to provide cover for advances and perform tasks while under fire. The shield is wide enough, and tall enough, to provide 100% cover to two people shoulder-to-shoulder, and more people if the attacker is within a narrow arc to the front of the shield. An armored viewing strip is located at head height so the users can see where they are going.

There is an armored hatch at thigh level so the users can access a doorway, fire a weapon, or plant an explosive charge. Assault shields are commonly used by law enforcement to protect SWAT teams as they move into position.

An assault shield provides full coverage against ranged attacks for the two, or possibly more, people behind the shield. Ranged attacks against the assault shield count as being against a stationary target, but have a maximum MoS of 1 and the shield's Armor counts as armor for the defender. Because it is so large and heavy, moving the assault shield requires two people, and they may not move any faster than a walk.

Protective Case: A protective case looks like a regular attache case. A thumb-released lock causes the case to spring open to reveal a series of connected armor plates covering a one hundred centimeter by fifty centimeter area. The panels are reflec coated, and some are even equipped with interference screens. Protective cases are often carried by bodyguards; at the first sign of

ARMOR

Type	Armor	Encumbrance	Concealable	Mass	Cost
▶ Low Tech					
Leather armor	5	0	somewhat	4	180
Studded Leather	8	0	somewhat	6	200
Light Plated armor	10	-1	somewhat	7	200
Heavy Plated Armor	14	-2	no	10	250
Light Composite	16	0	yes	2.5	250
Heavy Composite	32	-1	somewhat	6	400
▶ ProTech Clothing					
Long Coat	8	0	yes*	2.5	400
Jacket	6	0	yes*	1.5	300
Vest	4	0	yes*	1	200
Pants	4	0	yes*	1.5	250
Upper Body	6	0	yes	1.5	500
Lower Body	4	0	yes	1.5	500
Custom Item	+	+	yes*	+	+
▶ Partial Armor					
Helmets	x0.2	0	no	1	x0.3
Torso	x0.5	+	+	x0.5	x0.5
Arms	x0.25	+	+	x0.25	x0.25
Legs	x0.25	+	+	x0.25	x0.25
• The clothing itself is obvious, but the nature of the fabric is not.					
+ See description					
▶ Hi-Tech Armor	Armor Rating	Encumbrance	Concealable	Mass	Cost
Duraplast mail	24	0	yes	2	750
Durashell armor	50	-1/-2	no	10	2,000
Reflec armor	30*	0	yes	0.5	250
Interference Screen	28**	0	yes	1	575
*Against Lasers only; divide by two against Masers.					
**Against Masers only.					
Armor Rating is the protective value of the armor, to be added to the character's wound tresholds when resisting an attack;					
Encumbrance indicates if wearing a particular armor incurs a penalty to "physical" skills, i.e. skills that involve the AGI or FIT stats (but not BLD). A second number, separated by a slash, gives the penalty for someone other than the owner (for tailor-made suits);					
Concealable gives an arbitrary measure of how discreet a particular suit of armor is. The GM should decide, depending on circumstances and the Player's dress, if the armor is visible or not;					
Mass is the mass of a full suit of armor in kilograms. For torso armor divide by two;					
Cost is the cost of a full suit of armor in credits; for torso armor, divide by two.					

trouble, the bodyguards release the lock and use the protective case to shield their charge. These shields are a favorite of protective services across the solar system.

Stun Shield: Stun shields are riot shields with a built-in stun discharge system. The front of the transparent polymer shield has thin wires imbedded in it. When the activation stud is depressed on the handle, the wires are charged, and any person touching the shield is shocked. The power cell and controls are mounted below the shield grip.

The shield has power settings of 1 to 10, each draining the corresponding amount of energy units. The victim of a stun shield must succeed in a BLD roll against the weapon's power setting plus the attacker's Margin of Success. A failed roll means the victim is stunned (-2 Modifier) for a number of rounds equal to the Margin of Failure. On a fumble, the victim is knocked unconscious for a number of minutes equal to the MoF.

▼ ARMOR OPTIONS

Generally, most armor suits come with few extras since they are already quite expensive when purchased in quantity. Since most buyers of armor are government funded — the military and law enforcement — the extra cost outweighs any benefits that might be gained from accessories. (Either they buy the additional armor they need, or they have fewer armor suits with accessories that only limited personnel have the training to use.) Most private users do not care about the cost, or believe the cost is worth it.

Armor accessories fall under two categories: electronics and stealth. The electronics additions are added to helmets, since the two most important senses in combat situations are sight and sound. Stealth armor is not widely available, being used most commonly by elite law enforcement units and military special forces units. Possession of stealthed armor outside these units requires special permits from law enforcement agencies, a task involving mountains of paperwork and personal interviews.

Electronics: One of the most common modifications to any helmet is vision enhancement technology. Infrared and low-light are two of the systems available for helmets. Using systems similar to those mounted in space suit helmets, a 2D heads-up display is available. By adding microcameras around the helmet perimeter, a 360 degrees HUD compresses the surrounding image into a strip at the top of the users field of vision.

Normally, helmets don't allow for unimpeded hearing of sounds around the wearer. An optional external sound pickup can overcome this problem by providing three dimensional sound to the wearer. As a precaution against damaging the wearer's hearing, any extremely loud noise is automatically reduced to 80 decibels.

Internally mounted communicators are another common option. This is commonly done by refitting existing communication technology to the helmet. This increases the cost of the communicator being installed by 25%.

Stealth Armor: Stealth armor features numerous modifications to hide the wearer from prying eyes. Stealth armor is available at three levels of sophistication; each adds the indicated bonus to any Stealth Skill Test. Stealth +1 uses a camouflage pattern, sound absorbing materials and thermal signature isolation. Stealth +2 adds to this with greater thermal signature and sound reduction, but it also adds a special coating to absorb active EM radiation for sensors. Stealth +3 offers complete sound and thermal signature suppression and an enhanced coating that also features limited mimetic abilities.

Stealth armor is only available in full suits; partial stealth suits have no effect. It is possible to refit existing armor for limited stealth (equivalent to Stealth +1), but anything more complex requires

SHIELDS

Shield	ACC	DM	Parry	Armor Rating	Encumbrance	Wt	Cost	Code
Protective Case	-3	AD	+1	25	-1	3	150	4-D1
Assault Shield	-5	AD-3	0	60	-3	12	500	6-C1
Stun Shield	-2	AD+5/stun	+3	20	0	2.5	300	5-C1

the armor suit be manufactured with stealth capabilities. Advanced stealth armor is less effective without a helmet. To reflect this, reduce the Stealth bonus by one if the wearer does not use a helmet.

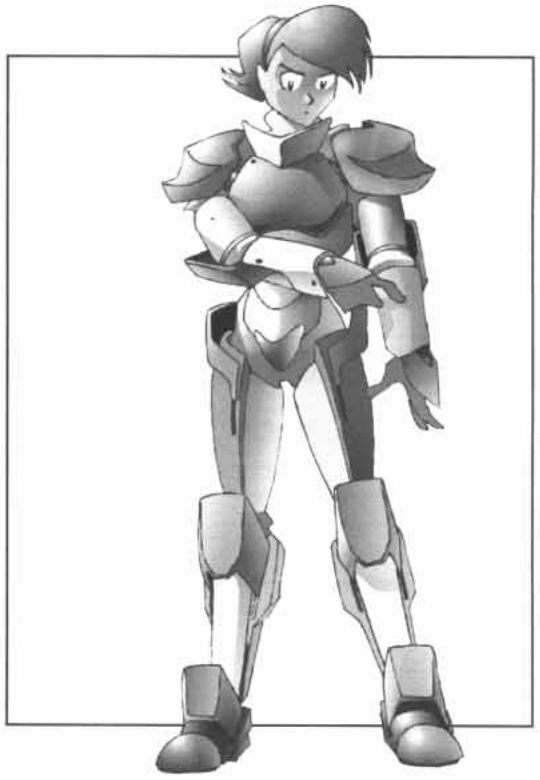
Stealth Accessories: Stealth armor is only as effective as what you carry. Certainly, carrying a chrome-plated autopistol looks cool, but it is hardly complementary to the capabilities of a top-of-the-line suit of stealth armor. All stealthed armor comes equipped with numberous pockets and storage spots for items so they do not degrade the performance of the stealth capabilities. A forty to fifty liter volume integral storage pack is a common accessory that is included with stealth armor. (Stealth space suits carry a mission pack instead.)

Some weapons and other items are available with stealth capabilities comperable to each level of function. These items possess the same Code, and use the same cost multiplier. For obvious reasons, energy weapons are the preferred choice for stealth. To avoid the high cost and lack of availability, stealth-capable bags of various sizes and capabilities are available to hide non-stealth items until they are needed. Prices range from 500 credits for a 10-liter Stealth +1 bag to over 10,000 credits for a 100-liter Stealth +3 duffle bag.

◇ OPTIONAL RULE: ARMOR DAMAGE AND REPAIR

Any time a person is hit by an attack, and the location is protected by armor, the armor protection may be degraded. Depending on the type of attack, divide the weapon's base Damage Multiplier by the indicated modifier (rounding off). This value is subtracted from the armor's Armor Rating.

The difficulty of repairing armor is widely dependant on the type of armor material and the extent of the damage. As a guideline, the greater the damage to the armor is, the harder it is to repair. Player characters with the Tinker Skill can attempt to repair the armor if they have the necessary replacement materials and tools. Since armor suits are formed from several pieces, the simplest method of repair is to purchase a replacement piece for the damage section. Characters with the Tinker Skill can easily replace the damaged section with the new section. Armor that is reduced to less that 25% of its original Armor Rating is considered unsalvageable.



ARMOR ACCESSORIES

▶ Accessory	Wt	Cost
Stealth +1	+1	x2
Stealth +2	+2	x8
Stealth +3	+4	x32
▶ Helmet Electronics		
Infrared	0.5	200
Low Light	0.5	150
2D Heads-Up Display	-	350
360-deg. Heads-Up Display	-	500
HUD Video Input Jack	-	+20
External Audio Pickup	0.01	75
Internal Communicator	-	30

DAMAGE TO ARMOR

Attacked by:	Damage to Armor
Heavy Weapon, Explosives	DM / 5
Melee (hacking & slashing), Chemical Slugthrower	DM / 10 (min. 1)
Melee (piercing), Laser, Gauss	DM / 20 (min. 1)
Incendiary	Add half of the Intensity to the above
Electricity, Stun, Maser	No damage

6

▶ D20 EQUIPMENT STATS

The following tables include game statistics for the equipment listed in this chapter. All stats and items not listed here, such as energy reserves, mass or cost, are the same as the SilCORE version or have a direct equivalent in the basic d20 rules.

MEDICAL EQUIPMENT

Item	Game Effects
First Aid Kit	If not present, -4 to Treat Injury checks
Field Surgery Kit	+2 to Treat Injury checks
Hand Mediscanner	+1 to Treat Injury checks
Portable Hospital	+4 to Treat Injury checks

SPACE SUITS

Suit Type	Equip.Bonus^1	Max Def. Bonus	Armor Pen.	Speed	Game Effects
Light Armor					
Soft Worksuit	+3	+4	-2	30 ft.	n/a
Civilian Crew Suit	+5	+4	-2	30 ft.	n/a
Military Crew Suit	+6	+4	-2	30 ft.	n/a
Apollo Crew Suit	+5	+8	0	30 ft.	n/a
Pilot Suit	+1	+8	0	30 ft.	n/a
Mars Suit	+1	+8	0	30 ft.	n/a
Military Mars Suit	+7	+8	0	30 ft.	n/a
Emergency Suit	+1	0	-4	30 ft.	Halves suit up time
Medium Armor					
Armored Suit	+14	0	-4	25 ft.	n/a
Augmented Suit	+7	+4	-2	25 ft.	+4 Wearer Strength
Heavy Armor					
Hard Worksuit	+8	+4	-2	20 ft.	n/a
Damage Control Suit	+8	+4	-2	20 ft.	Radiation, Fire Resistance
Shakunetsu Worksuit	+7	+4	-2	20 ft.	Fire Immunity

[1] Number before the slash is Equipment Bonus, number after the slash is non-proficiency bonus

SPACE SUIT ACCESSORIES AND OPTIONS

Equipment	Game Effects
Pseudo-Hand, Heavy	+5 ft reach
Pseudo-Hand, Light	+5 ft reach
Gravity Boots	+2 to any physical test in micro-gravity
Reinforced Boots	+2 Equipment bonus
Armored Boots	+3 Equipment bonus
Steele Grapple Gun	Dam 1d4 Bludgeon, RI 10ft

SEARCH AND RESCUE EQUIPMENT

Equipment	Game Effects
Hummer Rescue Saw	-10 to hit, Dam 4d10 Slashing
Sas Opener	+20 Strength
Powered Shears	Dam 1d20/round, Ignores first 5 points of Hardness
Rescue Jaws	Combine two previous
Oxy-Life	Automatic 1d4 Dam/5 min

D20 WEAPON STATS

The following tables include game statistics for the weapons listed in this chapter. All stats and items not listed here, such as mass or cost, are the same as the SilCORE version or have a direct equivalent in the basic d20 rules.

HI-TECH MELEE WEAPONS

Name	Damage	Crit.	Type	RI	Size	Special
HummerKnife	1d4+2	19-20	Piercing	n/a	Tiny	Need battery
HummerMachete	1d6+2	19-20	Slashing	n/a	Small	Need battery
HummerKatana	2d6+2	19-20	Slashing	n/a	Large	Need battery
Melee Weapon: Electric	Acts as Taser in addition to base melee weapon effect					

SMALL ARMS

Each requires the Personal Firearms Proficiency Feat.						
Name	Dam	Crit.	Type	RI	Size	Special
Holt Exterminator Pistol	2d12	20	Ballistic	30ft	Medium	-
Gyroc Pistol	2d6/8[1]	20	Ballistic	40ft	Medium	-
Gyroc Rifle	2d8/10[1]	20	Ballistic	110ft	Large	-
Gyroc Assault Rifle	2d8/10[1]	20	Ballistic	60ft	Medium	Automatic
Gyroc Sniper Rifle	2d8/12[1]	20	Ballistic	250ft	Huge	+1 bonus to attack
Gauss Needler	1d6	n/a	Piercing	20ft	Tiny	Can use poison
Gauss Rifle	2d10	19-20	Piercing	100ft	Large	-
Gauss Shotgun	2d6	17-20	Piercing	50ft	Large	-
Laser Pistol	2d4/6/8[2]	20	Laser	50ft	Tiny	-
Laser Rifle	2d4/6/8/10/12[2]	20	Laser	150ft	Large	-
Laser Sniper Rifle	2d12	20	Laser	250ft	Tiny	+1 bonus to attack
JO Pulsar-Alpha Laser Pistol	2d4/6/8[2]	20	Laser	50ft	Small	Automatic
JO Pulsar-Delta Laser Rifle	2d8/10/12[2]	20	Laser	150ft	Large	Automatic
Nakima H4 Heavy Laser Pistol	2d8/2d10[2]	20	Laser	50ft	Small	-
Dessa Hotshot-5 Laser Pistol	2d4/6/8	20	Laser	40ft	Small	Hotshot[3]
Walter-Stromm Police Special	1d6/2d4	20	Laser /Elec	40ft	Small	Includes Taser
Maser Pistol	2d6	20	Microwave	40ft	Small	Microwaves[4]
Maser Pistol	2d8	20	Microwave	140ft	Large	Microwaves[4]
Sonic Stunner	1d4	n/a	Sonic	20ft	Small	Stun[5]

[1] Use damage dice before the slash for first range increment; use second damage dice for subsequent range increments

[2] Damage dice depends on energy units expended; see descriptive text.

[3] Hotshot beam causes 4d12 damage, cause -2 modifier to attack per shot used (cumulative).

[4] Maser: ignore half armor (round down), if metallic armor cause automatic Electric attack.

[5] On a successful hit, the sonic stunner deal 1d4 points of sound damage and the target must make a Fortitude saving throw (DC 25) or be stunned for 1d6 rounds.

6

HEAVY WEAPONS

Each requires a specific Exotic Firearms Proficiency Feat. Weapons with "Automatic x2" add +5 to DC to avoid and cover twice as much area with fire.

Name	Dam	Crit.	Type	RI	Size	Special
9mm Chaingun	2d10	20	Ballistic	70ft	Huge	Automatic x2
24mm Anti-Armor Gun	3d12	20	Ballistic	200ft	Huge	-
60mm Light Mortar	5d8	20	Ballistic	175ft	Huge	Mortar[1]
30mm Rocket Launcher	6d6	20	—	150ft	Large	Rocket[2]
50mm Rocket Launcher	10d6	20	—	150ft	Large	Rocket[2]
Nakima ALX-2 Assault Laser	10d8	20	Laser	90ft	Large	Single-use
Pulsar-Omega Laser Cannon	2d8/10	20	Laser	100ft	Large	Automatic x2, Hotshot[3]
Nemesis Particle Cannon	3d12	20	Laser /Elec	120ft	Large	Beam[4]
GAC-2 Gyroc Cannon	3/4d12[5]	20	Ballistic	200ft	Large	-
"Armageddon Gun" (7.5mm)	2d10	20	Ballistic	120ft	Huge	Automatic x2, includes 40mm GL

[1] Attacking with a mortar is identical to throwing an explosive: make a ranged attack against a specific 5-foot square (instead of targeting a person or creature).

[2] Explodes like a grenade, dealing its points of damage to all creatures within a 10-foot radius (Reflex save DC 18 for half damage). Ignores up to 10 points of hardness if it directly strikes a vehicle, building, or object.

[3] Hotshot beam causes 5d8 damage, cause -2 modifier to attack per shot used (cumulative).

[4] Beam: causes second Electric attack as well, dropping one die per three range increments.

[5] Use damage dice before the slash for first range increment; use second damage dice for subsequent range increments

WEAPON ACCESSORIES

Type	Game Effects
VS Mirage EO Sight	+2 bonus to attack at 150 ft out to max. range
ME Pinpoint Laser Sight	+2 bonus to attack at 100 ft and closer
ME True-Sight(TM) Smart Sight	+2 bonus to attack, +4 if calibrated (see descriptive text)
Muzzle Brake	Halves penalty on second shot
Gas Recoil Cylinder	Halves penalty on second and third shots
Gyro Stabilizer	+2 bonus to attack, can only walk in straight line
Harness System	Cancel weapon's mass
Heavy Weapon Exo-Skeleton	Require Proficiency to use; +8 Equipment Bonus, +6 Str

DEFENSIVE SYSTEMS

Ballistic Anti-Missile	Engage and destroy (1-2 on 1d6) up to two missiles/rockets per round
Laser Anti-Missile	Engage and destroy (1-3 on 1d6) up to two missiles/rockets per round
Central Anti-Laser	Generates a 150ft cloud anywhere within 600ft that halves energy damage that passes within
Perimeter Anti-Laser	Generates a 450ft cloud that halves energy damage that passes within

ARMOR

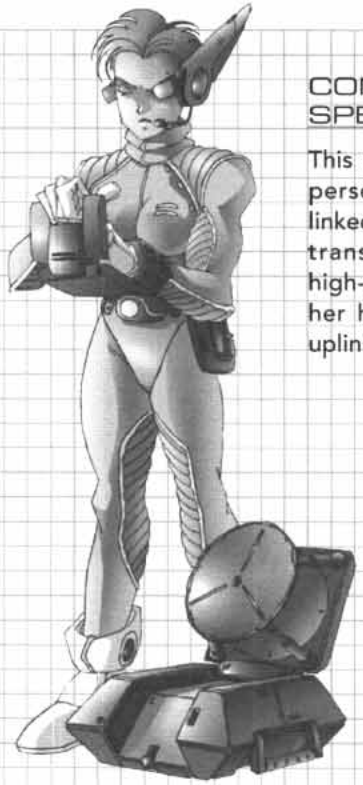
Armor	Proficiency	Equip.Bonus^1	Max Def. Bonus	Armor Pen.	Speed	Game Effects
Leather armor	Light	+2/1	+8	0	30 ft.	Archaic
Studded Leather	Light	+3/1	+7	0	30 ft.	Archaic
Light Plated armor	Heavy	+5/2	+2	-4	20 ft.	Archaic
Heavy Plated Armor	Heavy	+8/3	+1	-6	20 ft.	Archaic
Light Composite	Heavy	+6/2	+2	-4	20 ft.	Tactical
Heavy Composite	Heavy	+9/3	+1	-6	20 ft.	Tactical
ProTech Long Coat	Light	+3/1	+8	0	30 ft.	Concealable[2]
ProTech Jacket	Light	+2/1	+8	0	30 ft.	Concealable
ProTech Vest	Light	+1/1	+8	0	30 ft.	Concealable
ProTech Pants	Light	+1/1	+8	0	30 ft.	Concealable
ProTech Upper Body	Light	+2/1	+8	0	30 ft.	Concealable
ProTech Lower Body	Light	+2/1	+8	0	30 ft.	Concealable
Duraplast Mail	Medium	+7/2	+8	0	25 ft.	Concealable
Duraplast Armor	Heavy	+14/3	+6	-2	20 ft.	Concealable
Reflec Armor^3	Medium	+8/2	+6	0	25 ft.	Tactical
Interference Screen^4	Light	+7/2	+6	0	30 ft.	Concealable

[1]Number before the slash is Equipment Bonus, number after the slash is non-proficiency bonus

[2]The armor material, not the clothes themselves.

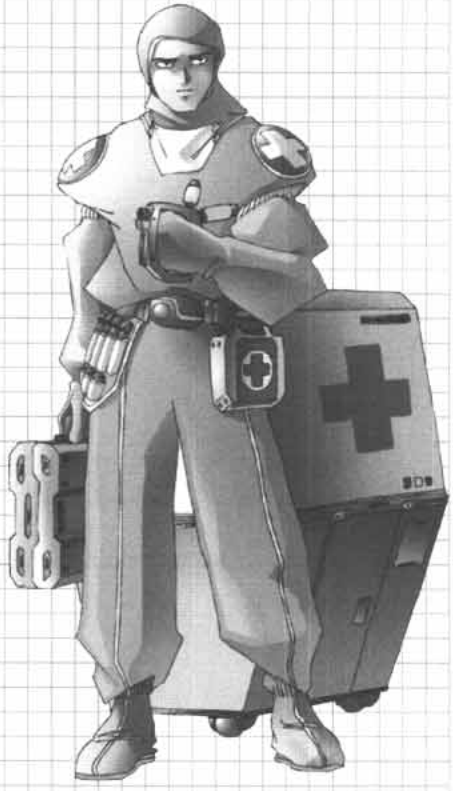
[3]Against Lasers only; divide by two (round down) against Masers.

[4]Against Masers only.



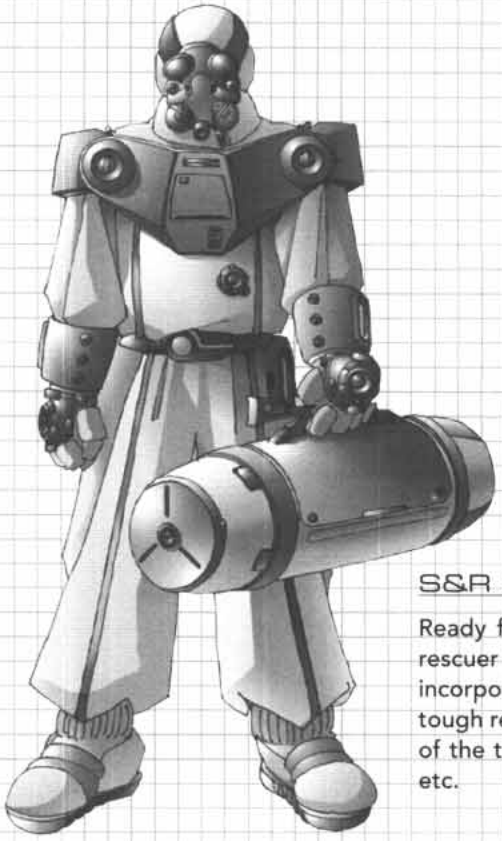
COMMUNICATION SPECIALIST

This spacer woman holds a personal computer that is linked through wireless data transmission to both the high-gain antenna worn on her head and the satellite uplink at her feet.



MEDICAL SPECIALIST

This spaceborn doctor stands ready to assist patients a portable first aid kit and a multi-purpose injector. His head and arms are both fully covered to stop blood spatters in zero-gravity. He stands in front of a packed field surgical unit.

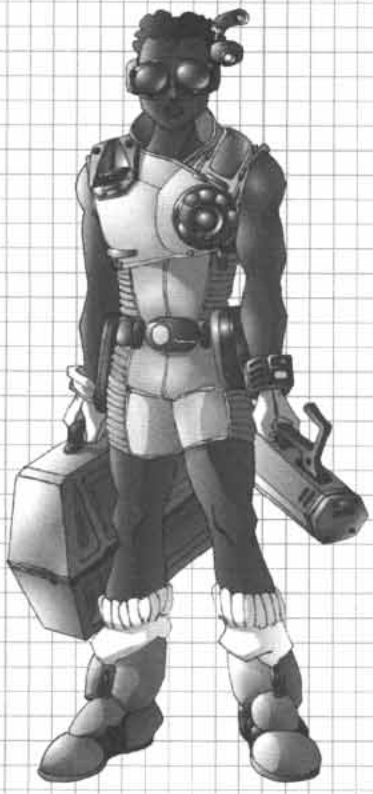


S&R SPECIALIST

Ready for any eventuality, this well-trained rescuer is protected by a full NBC suit with incorporated life support system. He holds a tough rescue package that contains his tools of the trade: foam bombs, powered shears, etc.

EXPLORER

This well-equipped explorer is ready for the wilderness of Earth: climbing equipment, compass, electronic binoculars, etc. The rope coiled on her left tight was manufactured in orbit and is capable of supporting several tons.

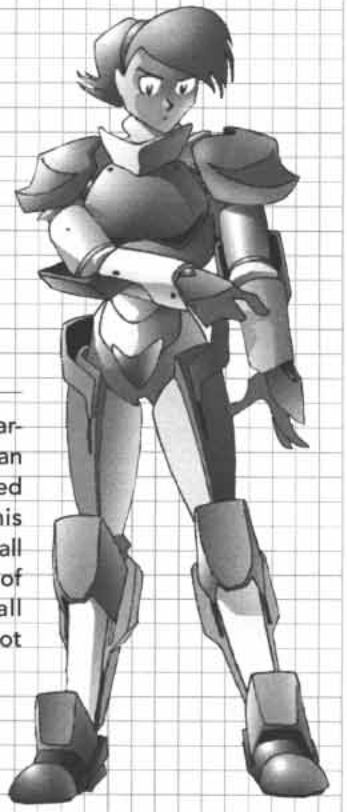


NOMAD

This man is a good example of a Nomad citizen. Lightly dressed, since the interior of the habitat is kept at a comfortable temperature, he's also ready to jump in a suit at a moment's notice. He carries a wide assortment of tools, both mechanical and electronics.

SOLDIER

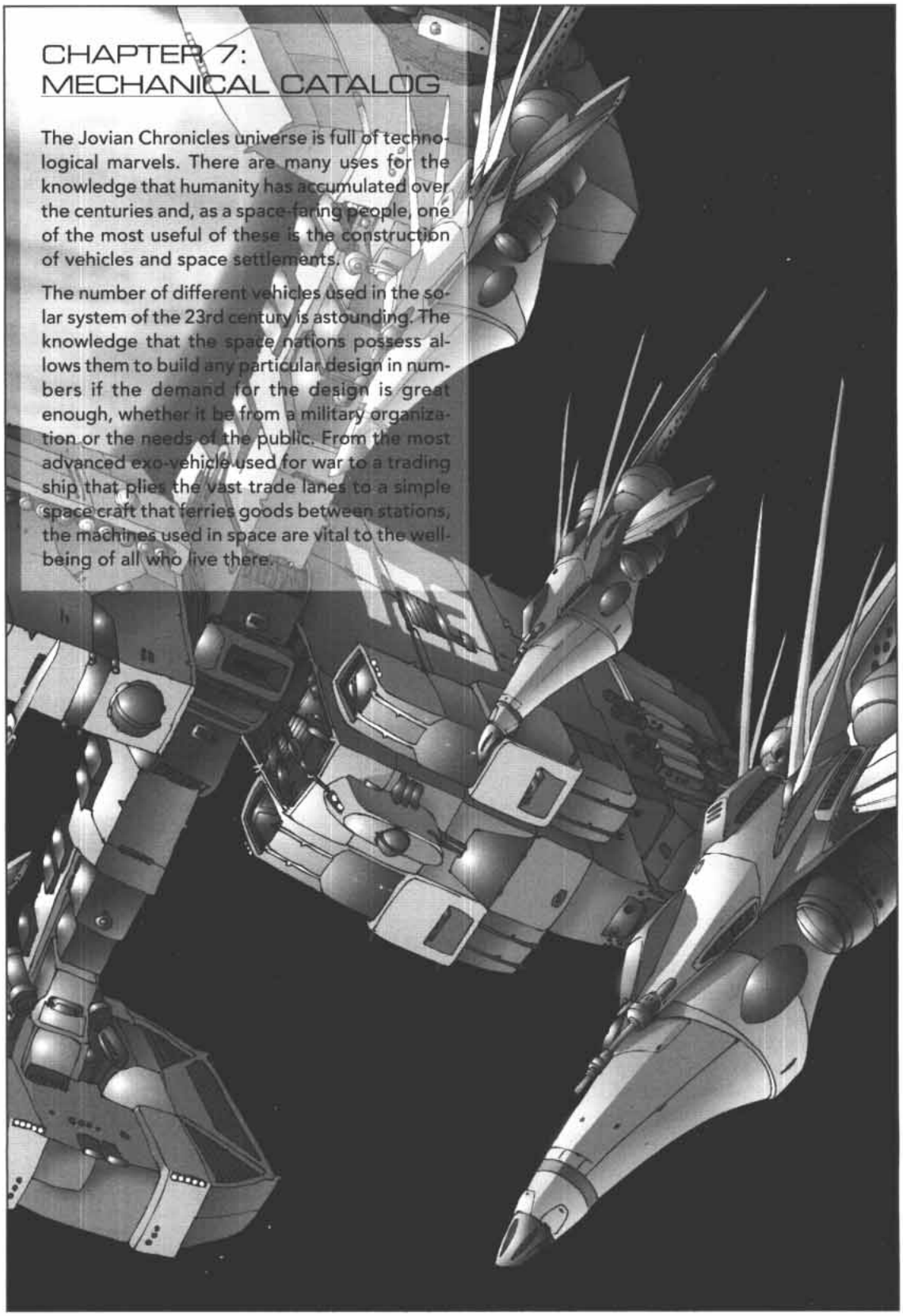
Clad in the best personal armor that the 23rd century can offer — short of a powered exo-suit, of course — this soldier can ignore most small caliber hits and even some of the big ones. Her overall mobility is restricted, but not by much.

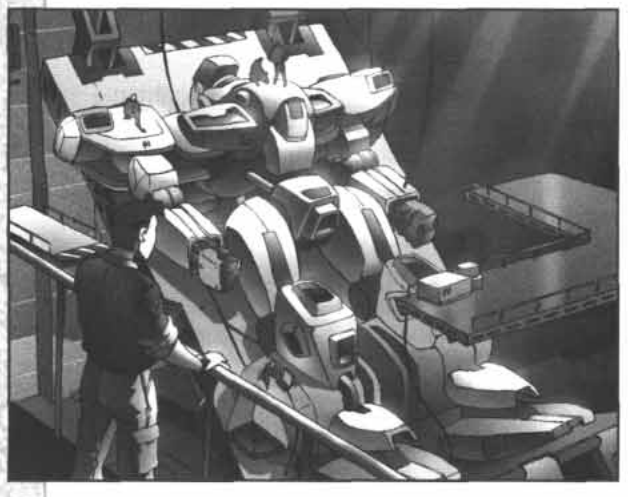


CHAPTER 7: MECHANICAL CATALOG

The Jovian Chronicles universe is full of technological marvels. There are many uses for the knowledge that humanity has accumulated over the centuries and, as a space-faring people, one of the most useful of these is the construction of vehicles and space settlements.

The number of different vehicles used in the solar system of the 23rd century is astounding. The knowledge that the space nations possess allows them to build any particular design in numbers if the demand for the design is great enough, whether it be from a military organization or the needs of the public. From the most advanced exo-vehicle used for war to a trading ship that plies the vast trade lanes to a simple space craft that ferries goods between stations, the machines used in space are vital to the well-being of all who live there.





▶ EXO-ARMORS

The exo-armors (short form for armored exo-skeleton) are the ultimate evolution of the personal combat space suit of the early twenty-first century. Originally no larger than a man, they increased in size until some of the biggest were nothing less than small ships. This was necessary in order to carry the enormous amount of fuel, armament, and electronics necessary to accomplish their assigned mission. Spacefighters remain in use, but their lack of maneuverability and endurance (compared to exo-armors) confines them to strike and fire-support roles.

▼ LINEAR FRAME AND COCKPIT

The linear frame is the main control element of the exo-armor. It looks like an strength-enhancing industrial exo-skeleton and wraps the pilot, reproducing his every movement. The exo-armor's onboard drive computer then interprets these motions and moves the armor's limbs accordingly, firing apogee motors as needed to compensate. The linear frame control system gives the exo-armor an uncanny maneuverability as well as a strangely human grace.

Space flight is controlled via special joysticks located near the hand controls. A minimum of training is necessary to fully control the armor, even if the computer can provide verbal and visual assistance. The cockpit's internal walls are covered with layered monitors linked to various sensors and cameras in the outer hull of the exo and display an unobstructed view of the world around the vehicle. All relevant operational information (IFF, targeting, velocity, etc) is displayed either in the flight helmet worn by the pilot or directly on the screen. The machine's "head" and main sensors are slaved to the motions of the helmet, adding to the "humanity" of the exo-armor.

▼ CHASSIS AND ACTUATORS

Since an exo-armor is designed to emulate and reproduce the movement of the human body, it is built around a composite skeleton to which the various components and actuators are attached. The "bones" are made of composite material specifically designed to optimize the transfer of loads passing through them. Limited flexibility enables the frame to absorb casual kinetic stress without any damage.

Exo-armors rely on several different types of actuators to move about, from conventional hydraulic systems or high-strength myomar fibers to highly specialized linear electric motors. The smaller exo-suits almost never use hydraulics, as myomars are easier to adapt to the human form. The fibers are wrapped around an inner shell which contains the wearer and various motion-sensitive sensor arrays.

▶ SPACESHIPS

Spaceships of the twenty-third century are very different from the practical designs used in the early age of space exploration. Modern ships sport a thick ablative skin and a massive architecture designed to stand particle erosion and lenghty acceleration. Other vessels, designed at a lower cost or for shorter trips, are just a support frame for habitat modules, fuel tanks and engines.

Each ship relies on powerful fusion thrusters (called plasma drives) to move. When possible, they accelerate for half the voyage, then turn around and decelerate at the same rate for the rest of the trip. Except for a short weightlessness period midway through the trip, the passengers feel gravity during the transfert. When the ship is in acceleration, "up" is toward the nose and "down" toward the engines. The internal organization of a ship is thus very similar to a skyscraper, with decks stacked on top of each other instead of following the lenght of the hull like a plane or a boat.

Ships are generally not equiped to descend on the surface of a planet. Aside from being non-aerodynamic, they are much too heavy to land on anything bigger than an asteroid. The exceptions to this is the Moon, where small ships routinely land to transport cargo.

7

▶ SPACECRAFT MANEUVERS

Spacecraft can perform a variety of special maneuvers and operations due to the nature of their movement system and the milieu in which they operate. The following rules apply to all vehicles equipped with the Space movement type.

▼ FUEL SKIMMING

Fuel skimming is a maneuver where a scoop-equipped vehicle plunges through a planetary atmosphere and use its speed to force gases into its holding tanks. Fuel skimming is a relatively simple maneuver, a Piloting roll versus a threshold of 4. If failed, the vehicle takes on only 1d6 x 10% of the intended load. A fumble damages the scoop.

Game-wise, the retractable scoop is a Tool Arm that cannot punch. Its Size rating is cross-referenced with the Size-to-Mass table (page XXX of the rulebook) to determine how many tons of gases can be scooped up per turn. These are sent to a dedicated cargo bay. The table on page XX shows the volume per mass — the gases are counted as Helium for calculation purposes. The raw gases can be delivered to a processing facility or processed onboard. It takes one hour to process a number of cubic meters equal to twice the vehicle's Size. Each cubic meter of raw gases yield 0.01 cubic meter of usable hydrogen fuel.

▼ AEROBREAKING

Aerobreaking consists of dipping into a planetary atmosphere to shed velocity, the spacecraft's kinetic energy being converted to heat. This means that the vehicle needs less fuel to brake, increasing either transit time or cargo payload.

The vehicle must have a re-entry system in order to aerobrake. The pilot must make a Piloting roll against a Threshold of 2 to keep the craft correctly oriented or suffer one Fire attack as per normal reentry rules. Modifiers due to damage apply in full. For each successful Piloting roll, the craft loses ten percent of its speed. If there is no re-entry system present, one can still aerobrake for five percent of speed but only half damage.

▼ COASTING

Many of the ships don't have enough fuel or reaction mass to keep on accelerating throughout a long trip, since some must be kept as combat reserve. Fortunately, a spacecraft will keep coasting even if no acceleration is applied. The following formula shows the travel time of a spacecraft based on the amount of Burn Points the captain or pilot is willing to use during the trip. For simplicity, the actual acceleration time is ignored since it will account for only a short part of the total trip time.

COASTING

Travel Time = Distance/(BPs x 15 x Efficiency)
Efficiency = Actual Thrust/Drive Section Thrust
Time is in seconds (divide by 3600 for the result in hours), Distance is in meters, BPs is the total Burn Points spent.

▼ GRAVITY WHIP

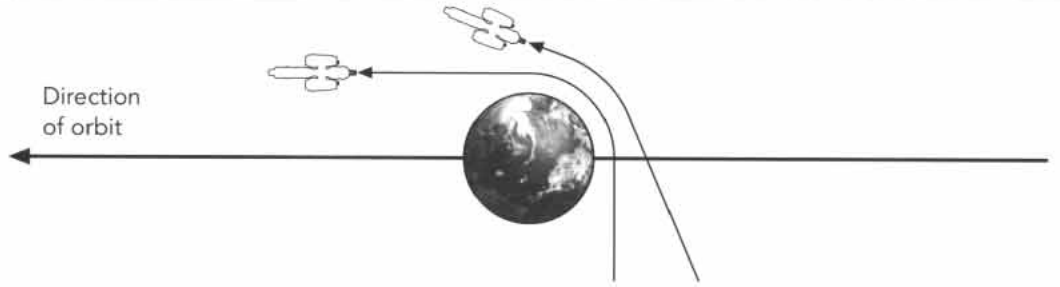
The term "gravity whip" is used to describe the manuever by which a planet's momentum is used to accelerate (or decelerate) a spacecraft. Many space probes used this effect to save fuel and travel time, notably the Voyager space craft. A gravity whip can only be used in a three-body system — the spacecraft gains or loses speed when compared to the entire system, not the body around which it whips.

First find the speed of the vehicle and the orbital speed of the planet. They are added together, then multiplied by the angle multiplier. The result is divided by two to get the spacecraft's new speed. A revised travel time can then be recalculated.

ANGLE MULTIPLIER

Angle*	Multiplier
15	
30	
45	
*Angle between spacecraft's trajectory and body's orbital trajectory.	

GRAVITY WHIP



▼HYPERTHRUSTING

Hyperthrusting is a risky maneuver in which the safety parameters of an engine are widely exceeded in order to provide increased thrust. Classic rocket engines can rarely do this, but plasma combustion chambers can practically double the available thrust. Such a maneuver is very dangerous, as the thrusters may be damaged by overheating, or even explode.

When hyperthrusting is selected, the engine immediatly supplies twice its maximum Overthrust, at a cost of 3 BPs per MP spent. A Piloting Skill test versus a threshold of 5 is required. If failed, the thruster permanently loses a number of MPs equal to the Margin of Failure because of heat damage. Should the total reach -5, the thruster explodes, causing one die times the Overthrust rating (in MP) worth of damage.

▼USING THRUSTERS AS WEAPONS

By definition, a good engine makes a good weapon: superheated plasma is extremely dangerous up close, though it loses power rapidly with distance. The Damage Multiplier of thrusters is equal to the MPs spent, times half the Size of the vehicle. The Accuracy of the thruster is equal to the Maneuver of the vehicle. Burn Points are spent as normal. The plasma diffuses rapidly, losing half its DM per hex of range, including the first one.

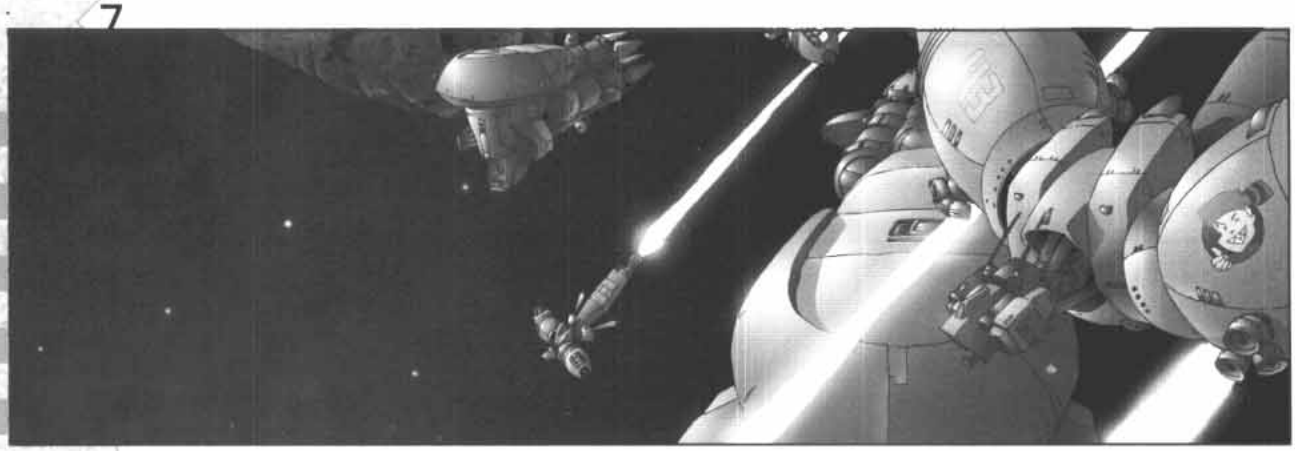
▼REMOTE CONTROL

Remote controlled vehicles are referred to as drones. The remote control equipment is actually a software modification of the Autopilot Perk. Instead of responding to its internal programming, the Autopilot receives its instructions through the communication system and sends back environmental data gathered by its sensor array. A drone must thus be equipped with all three of the above systems. Drones are not affected by Crew hits — any such damage is ignored, though Armor points are lost as usual.

Drones are limited by the controller's own action total. A single person cannot control more than one vehicle at a time, though a vehicle can have multiple controllers. Because of data-encoding procedures and control lags, remotely piloted vehicles suffer a -1 modifier on all of their rolls. If the vehicle is controlled through a satellite uplink, the extra lag increases the penalty to -2. The vehicle must be within communication range. ECM affects the control link normally, and must be tested every turn.

Drones may be wire-guided instead, trailing a very fine wire for control (maximum range is equal to half the base Communication range). This removes the penalties and makes the drone immune to ECM. A Piloting roll must be made every turn against the highest MP cost for the hexes traveled to avoid snagging the cable. Flying drones must test also and use the overflown ground's MP cost. Space drones are not affected. Failure means the cable is stuck and the drone must halt for the next round to free it. A fumble means the cable is severed.

If contact is lost, the software automatically switches to the Autopilot.ÊAn Autopilot program consists of a single line of text and should be written down when the drone is released.



▶ SPACE TERRAIN

The environment of space presents a number of unique characteristics that makes it very different from everything humans have had to face before. New rules have to be learned, and new dangers have to be faced.

▼ PLANETARY RINGS

Many planets in the solar system are surrounded by rings, collections of small debris and rock that are trapped by the gravity well and end up in orbit. The best example of these are Saturn's magnificent ring system, though Jupiter, Uranus and Neptune also boast sizable, if more transparent, rings.

Because they are composed of millions of small particles, rings pose a travel hazard for fast moving space ships. There are, however, reasons to go through them. They make excellent hiding places, are a good deterrent to pursuit, and can yield ice and other valuable volatiles to a stranded vessel.

Unless the ship is moving at a very high velocity, collisions will generally cause only minor abrasion damage, generally not worth checking for. The Planetary Ring table below assigns a Density to four main ring systems. The various ring densities within each system are ignored for playability (any good astronomy book will give more specific detail on those). The current spacecraft's speed (in hexes/turn) is multiplied by the Density to yield the number of damage point applied to the spacecraft. The Density also show the amount of water, material or volatiles that can be collected within the ring, per turn (in kilogram).

PLANETARY RINGS

Location	Density	Obscurement	Composition
Jupiter	10^{-8}	0	Rock, some Ice
Saturne	10^{-1}	2	Ice, Frozen Gases
Uranus	10^{-6}	0	Ice, Frozen Gases, Hydrocarbons
Neptune	10^{-7}	0	Ice, Frozen Gases, Hydrocarbons

▼ RADIATION BELTS

Half the planets of the solar system have strong magnetic fields, caused by liquid movement within their core. These fields trap incoming charged particles before they can hit the surface, creating multiple radiation belts around the planet (the stronger the field, the more numerous belts there are). These belts are a significant radiation hazard, though most spaceships have screens strong enough to face them without any problem. For playability purposes, the belts have been abstracted for each planet: each number represents a belt. When a ship crosses a belt, it receives a certain amount of rads and damage points per turn, as indicated. Campaigns using the Cinematic RDL need not worry about radiation belts, unless it is for dramatic purposes.

RADIATION BELTS

Location	Rads	Damage	Effects
Earth	1d6 x 10/1d6 x 5	15/10	Haywire
Jupiter (1-4)	1d6 x 1700	25	Haywire
Jupiter (5-10)	1d6 x 700	15	Haywire
Saturn	1d6 x 500	15	Haywire
Uranus	1d6 x 50	15	Haywire
Neptune	1d6 x 30	15	Haywire

▼ SHADOWS

Unlike most planetary environments, where objects and atmosphere both reflect light so that it shines on several sides at once, in space light comes from a single source, the Sun. Even though there are some reflective surfaces, most of the time light comes from only one direction, creating deep shadows. These shadows, in addition to being very cold (since there is no heat transfer), make most visual sensors useless.

Nighttime combat functions as daytime combat except that the night detection score of a vehicle is used instead of its daytime detection score.

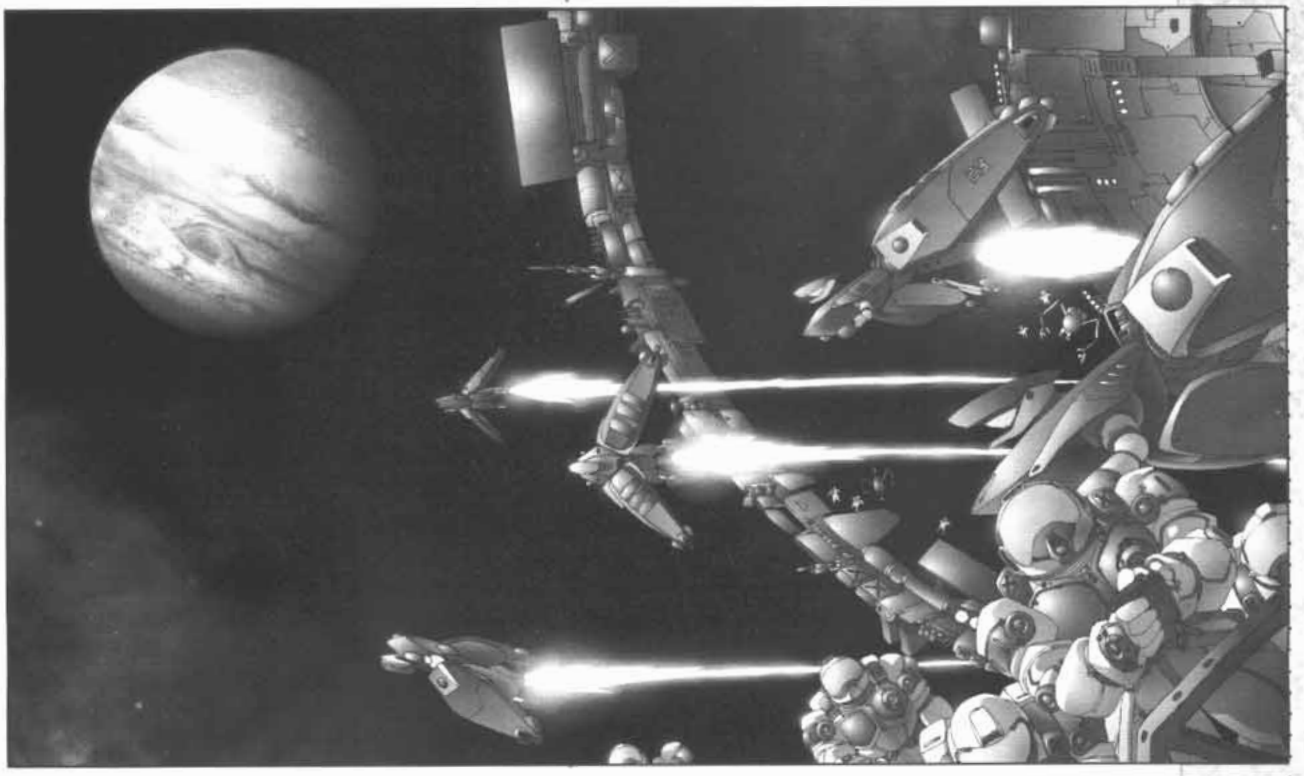
▼ EXTREME TEMPERATURES

Extreme cold (-150C or lower) or extreme heat (+150C or higher) is very detrimental to the functioning of vehicles. Any vehicle that lacks the appropriate Hostile Environment Protection Perk automatically suffers Light damage whenever pushed to Top speed. In addition, such vehicles must roll one die at the beginning of each combat round. On a roll of one, the vehicle breaks down for a number of rounds equal to the roll of one die.

In space, high temperatures are found only when exposed to the Sun, while shadows are extremely cold. Vehicles can rotate to spread the heat on their hull and thus avoid the temperature problems mentioned above.

◇ VACUUM

Only vehicles that are specially equipped for vacuum (i.e. have the Perk Hostile Environment Protection: Space) can function in a vacuum. If the vehicle lacks life support, the crew must be equipped with vacuum suits. In that case, treat all vac-suited crew injuries as if they were one damage effect higher. For example, if a Light Damage result produces a crew effect (Stunned), it is replaced with the Heavy Damage result (10% casualties). Likewise, if the vehicle takes Heavy Damage and suffers a crew hit, the damage is increased to the same as Overkill: the crew is dead or incapacitated by the decompression, leaving the vehicle crewless.



7

▶ PATHFINDER

DATA

Name:	Pathfinder Alpha
Production Code:	EAL-04A
Origin:	Jovian Confederation
Manufacturer:	Jovian Armor Works
Type:	Light Exo-Armor
Role:	Assault, Fighter, Reconnaissance, Search & Rescue, Tactical Strike
Control System:	Linear Frame
Height:	15.4 m
Width:	11.4 m
Empty Weight:	28.5 Tons
Loaded Weight:	35 Tons
Powerplant:	1570 KW
Main Thrusters:	4 x 12,000 kg, 2 x 5000 kg
Apogee Motors:	16
Walking Speed:	36 kph
Acceleration:	2.8 g
Onboard Sensors:	ECCM, Fire Control Radar, Infrared/Ultraviolet, Lidar, Low-light, Magnetometer, Microwaves, Motion Detectors, Radcounter, Search Radar, Telescope
Fixed Armament:	2 x PL4 plasma lances
Additional Armament:	Jovian Optics 652A or 792R Particle Cannons, MMJ-4 Missiles, RJ-56 Rockets, MD-5555 Massdriver
Defensive Systems:	Mag Screen
Equipment:	Escape Pod, EWAC Systems, Satellite Uplink, Searchlights

◇ OVERVIEW

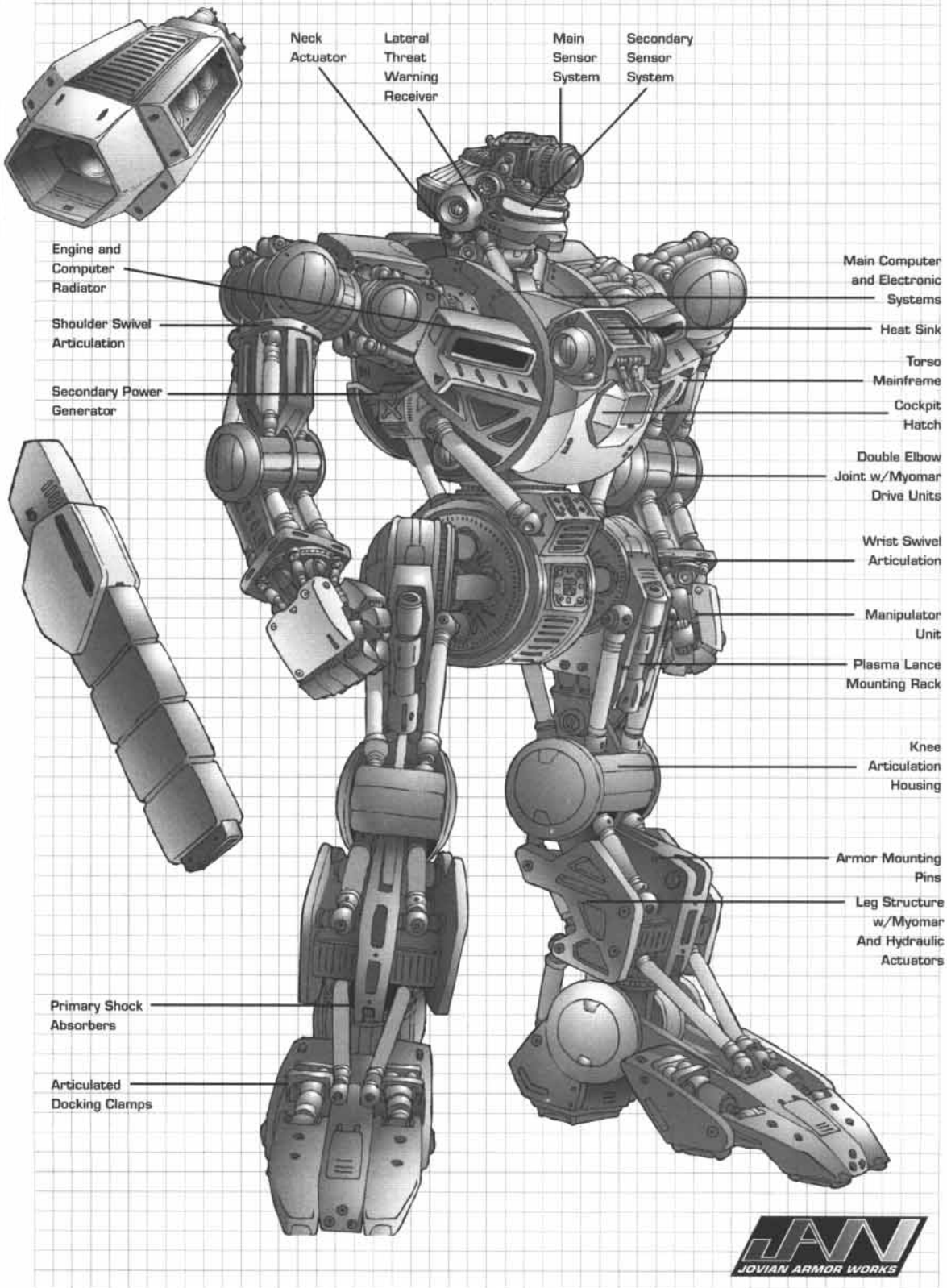
The original Pathfinder was one of the oldest exo-armors in the Jovian military arsenal. A development of the ill-fated EAL-03, the Pathfinder was found to be a rugged if simplistic design, easy to field and maintain. About half of the JAF's exo-armor squadrons were composed of Pathfinders at the time of the Battle of Elys_e, and although somewhat fragile by exo-armor standards, they performed admirably despite heavy losses.

Almost immediatly following the Battle of Elys_e, an upgrade program was started to rebuild the forces of the JAF. The objective was to rapidly increase the defenses of the Confederation, so exo-armors had to be turned out at a faster rate. The engineers at JAW reworked the design, reshaping the Pathfinder's complex rounded skin into something that was easier to mass-produce. The internal mechanisms were also reworked for improved performance, following pilots' advice and suggestions. Most notably, two new hardpoints were installed in the hips to allow for additional weaponry or equipment.

◇ CAPABILITIES

The standard armament carried by the Pathfinder is light because frontline combat is not a primary design requirement. The basic configuration centers around a Jovian Optics 652A particle cannon. The cannon is mounted on a modular rack on the right arm, which enables the technicians to easily replace it with another weapon. As with other Jovian designs, it is made up of modular sections for easy repair and upgrade capacities, and is also available in hand-carried rifle form. In case of unexpectedly strong opposition, two medium missiles are mounted on the left shoulder; two plasma lances are also available for close-in fighting, stored in thigh flip-open compartments.

Long range sensors are standard issue on all Pathfinder variants. The mass-production vehicle retains the original blast shield, which can be lowered to protect the main sensor array. A medium-range radar and EWAC system is mounted on the right shoulder hardpoint to enable the Pathfinder to find any intruder using either standard radio communication or a search radar near its patrol trajectory.


Neck Actuator
Lateral Threat Warning Receiver
Main Sensor System
Secondary Sensor System
Engine and Computer Radiator
Shoulder Swivel Articulation
Secondary Power Generator
Main Computer and Electronic Systems
Heat Sink
Torso Mainframe
Cockpit Hatch
Double Elbow Joint w/Myomar Drive Units
Wrist Swivel Articulation
Manipulator Unit
Plasma Lance Mounting Rack
Knee Articulation Housing
Armor Mounting Pins
Leg Structure w/Myomar And Hydraulic Actuators
Primary Shock Absorbers
Articulated Docking Clamps
JAW
JOVIAN ARMOR WORKS

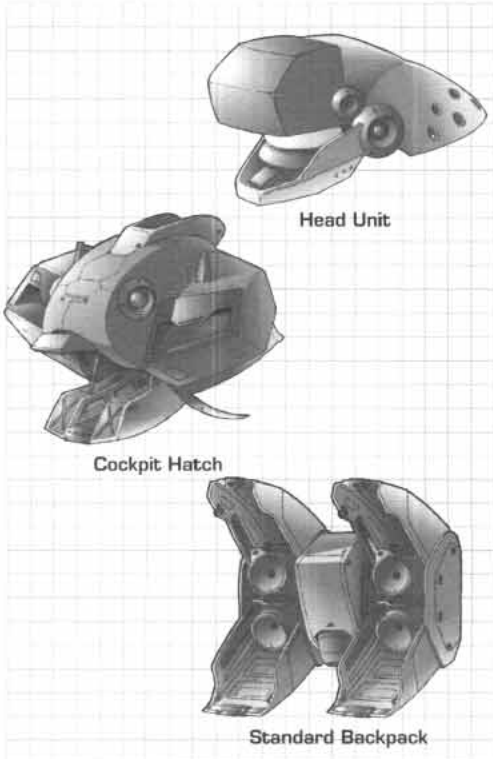
7

▼ PILOT'S COMMENTS

"Entering the cockpit of a Pathfinder is not an easy thing. The main hatch is not large, meaning you have to squeeze through — it's generally easier if you are in microgee. The hatch controls are located at the right hand side of the torso. Grasp the recessed yellow and black bar, pull and twist a quarter turn to the left, and the hydraulics will do the rest.

"The linear frame is easy to reach, because it sort of extends on its support strut so that it rests just beside the opening. Put your feet in the restraints, and let the frame adjust to your body. Most pilots have their own exo, so they don't have to readjust the frame all the time — though it takes only about 30 seconds to do so.

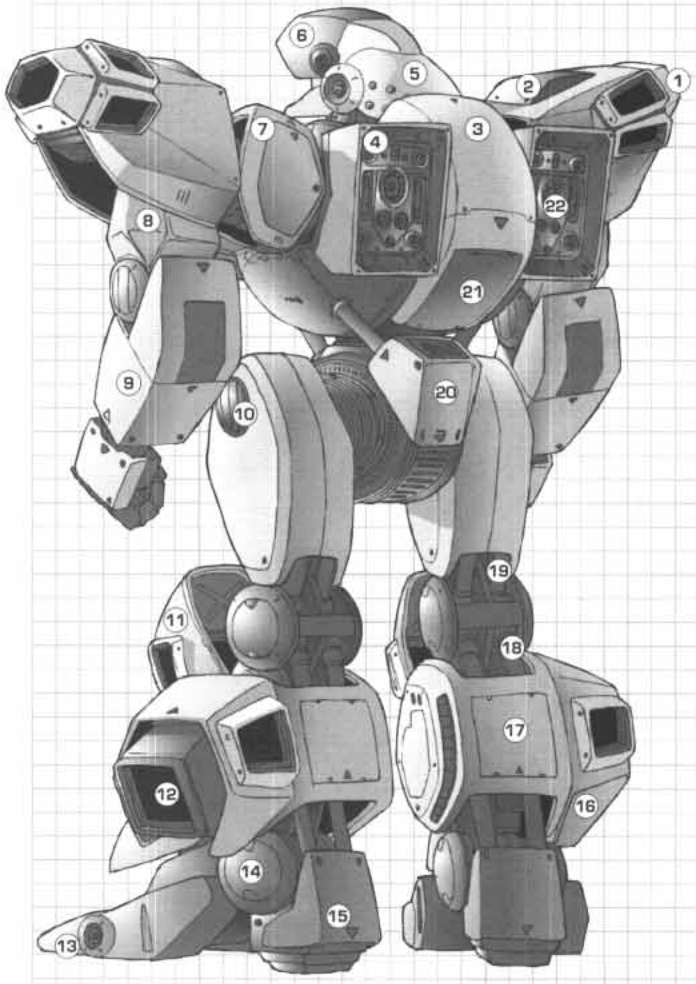
"Everything is right where you need it, from the tactical display toggles to the flight controllers. All information is prioritized and shown in nice, bright icons and short data forms. It's real easy to get used to. Heck, I'd bet you a kid could hop in here with a manual and learn to fly the exo in a few minutes. Okay, so maybe I'm exagerating... a little."



Head Unit

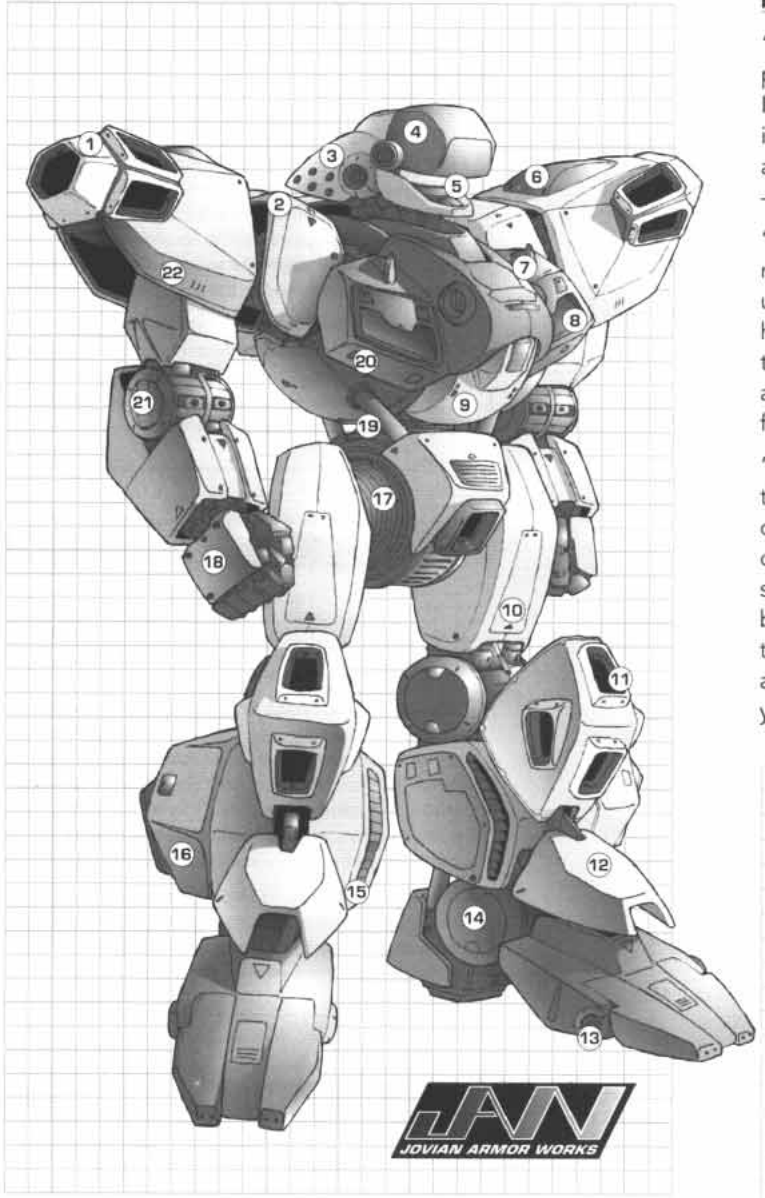
Cockpit Hatch

Standard Backpack



▼ REAR VIEW

1 ..... Shoulder Modular Thruster Block	12 ..... Lateral Leg Thruster Array
2 ..... Shoulder Hardpoint (covered)	13 ..... Docking Clamp (retracted)
3 ..... Fusion Core Housing	14 ..... Ankle Articulation Housing
4 ..... Plasma Drive Module Hardpoint	15 ..... Heel Block
5 ..... Head Fairing	16 ..... Leg Thruster Housing
6 ..... Main Sensor Housing	17 ..... Leg Maintenance Access Panel
7 ..... Shoulder Actuator Group Housing	18 ..... Leg Actuator Connecting Rod
8 ..... Laminated Armor Panel	19 ..... Leg Myomar Actuator
9 ..... Forearm Modular Armor Panel	20 ..... Waist Drive Heat Sink
10 ..... Right Waist Hardpoint	21 ..... Main Fusion Core Access Panel
11 ..... Knee Thruster Housing	22 ..... Fusion Core Power Output Port



▼ FRONT VIEW

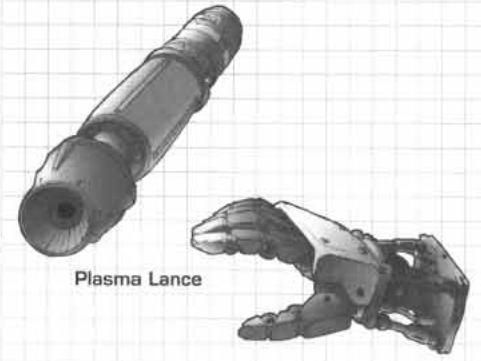
1 ..... Modular Shoulder Thruster Block	12 .. Articulated Laminated Armor Greave
2 ..... Shoulder Actuator Group Housing	13 ..... Docking Clamp Articulation
3 ..... Head Heat Sink Output Ports	14 ..... Ankle Articulation Housing Access
4 ..... Main Sensor Housing	15 ..... Leg Heat Sink Output Port
5 ..... Secondary Sensors Defense Panel	16 ..... Leg Thruster Housing
6 ..... Shoulder Hardpoint (covered)	17 .... Flexible Drive Train Protective Cover
7 ..... Upper Torso Sensor/Searchlight	18 ..... Three-axle Manipulator
8 ..... Torso Heat Sink Output Port	19 ..... Waist Rotation Ring
9 ..... Cockpit Hatch	20 ..... Computer Access Port (typical)
10 ..... Plasma Lance Housing Port	21 ..... Elbow Articulation Housing Access
11 ..... Upper Knee Thruster Port	22 ..... Laminated Armor Panel

▶ PILOT'S COMMENTS

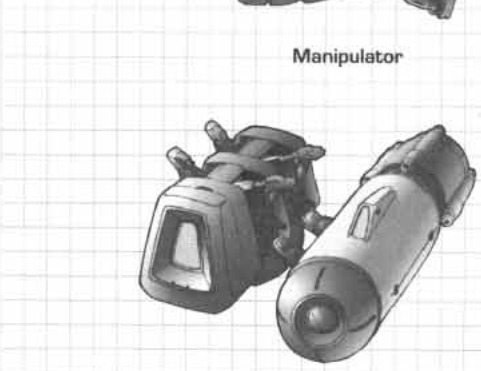
"Some exos are so sluggish you have to compensate all the time. Not so with the Pathfinder. It's not quite like wearing a set of clothes, but it's close. Once you master the flight control and the tactical display, it handles like a charm — for a thirty-plus ton spacecraft, that is.

"The exo is equipped with one of those Nakasu miniaturized plasma drives, and when you open up the throttle it can kick back at two and a half gees. It's got a good reserve of re-mass, too, so you can generally ignore the gauge for a few minutes. Don't expect to make the trip from Jupiter to the Belt in one of these, though.

"There's only one thing that annoys me about the Pathfinder. Seems like the designers couldn't decide whether they wanted a scout or a light combat unit. You've got more sensors than you can shake a joystick at, ECCM to burn through any interference, and enough thrust and maneuverability to fly out of almost any situation. Except for the missiles, though, you don't have much real firepower."

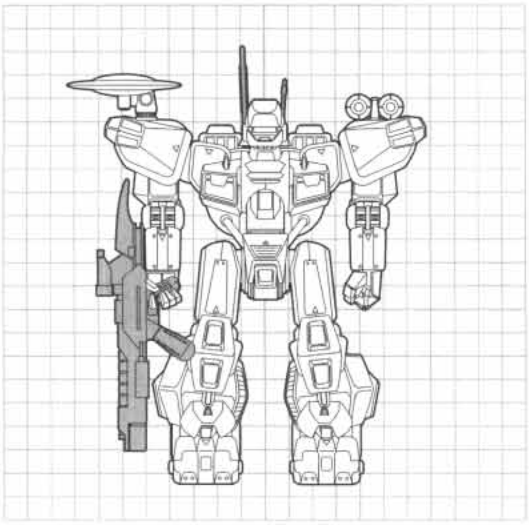


Plasma Lance



Manipulator

MMJ-4 Missile

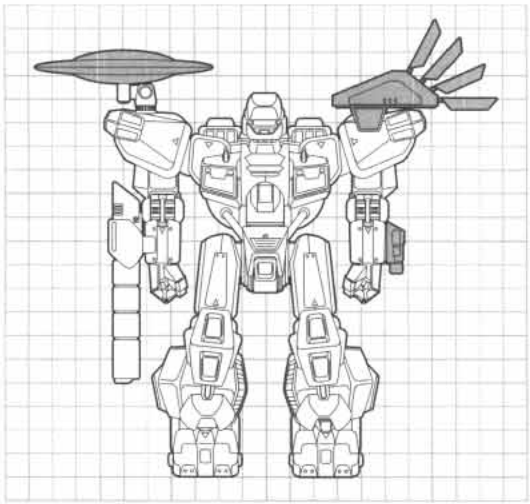


EAL-04A PATHFINDER CT

Add:	792R Particle Cannon, 200 BPs
Remove:	652A Particle Cannon
Change:	Upgrade Space Movement to 2.9 g, Communications to +2/20 km

The Command Type is used by officers and ace pilots. The enlarged antenna houses advanced communications gear, while the engine is more powerful than in the standard model, giving the CT greater acceleration and range. The other additions are small whisker-type antennae and many small sensor cameras that are linked to the main screen of the machine.

The CT carries more powerful weapons than the standard EAL-04A. As with the standard Pathfinder, the detection gear of the command type is composed of a MR-65 EWAC system. This is sometimes replaced by a long range radio communications system if the mission calls for it.

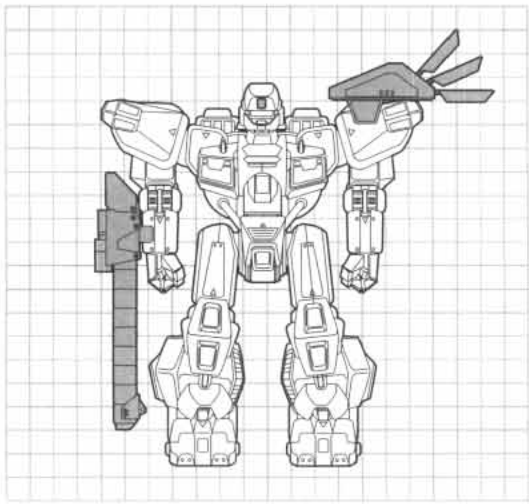


EAL-04A PATHFINDER RC

Add:	400 BPs, Fuel Efficient (1.5 times)
Remove:	MMJ-4 Missiles
Change:	Upgrade Sensors to +4/10 km

The RC was created to fill the need for a long range reconnaissance exo-armor unit. The engine has larger thrusters than the standard model and has adaptators for two reaction mass tanks. The sensor array is both larger and more efficient than that of the standard EAL-04A. The RC has an MR-130 EWAC system on its shoulder. The two MMJ-4 missiles are replaced by an array of sensors and communications gear.

The RC has been used since 2194 and seen action against pirates. The early warning capabilities provided by its sensor array have made it very popular with line units, who rely on it to shield them from surprise attacks.



EAL-04A PATHFINDER ST

Add:	MD-5555 Massdriver
Remove:	All Weapons
Change:	Upgrade Sensor Base Range to 10 km

The Sniper Type is the most recent and specialized version of the Pathfinder. The standard blast shield is replaced with a visor to cover the main sensor array; this is equipped with a trio of advanced telescopic lenses and other types of detection devices.

The main weapon of the ST is a Jovian Optics MD-5555 massdriver rifle which fires high speed armor-piercing slugs. Two different models of ammo clips are available, with 10 slugs for single shots, or 30 slugs for bursts. The ST was inducted to the JAF in 2208 and only been seen in combat at the battle of Elysée.

SILCORE STAT BLOCK

Name:	EAL-O4A PATHFINDER ALPHA
Size:	11 (Tall, 15.4 m)
*Defensive Threat Value (DTV)	
Movement:	Walk 6/12
Space	14/28
Maneuver:	0
Armor:	22/44/66
*Miscellaneous Threat Value (MTV)	
Crew:	Living 1; Computer 1 (Dumb, Level 2)

Deployment Range:	700 Km
Reaction Mass:	500 BP
Perks and Flaws: Accessory: Autopilot, Searchlight, Life Support, Escape System; Communications: Satellite Uplink; Armor Quality: HEAT Resistant 4; Arms: 2x Manipulator Arm 11; Hostile Environment Protection: Radiation 4, Vacuum; Information Warfare Devices: Electronic Counter Counter Measures 4; Reinforced Systems: Backups, Crew; Weakness: Exposed Auxiliaries; Negative Feature: Large Sensor Profile 2	

*Offensive Threat Value (OTV)

Quantity	Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
1	652A Particle Cannon	F	+1	x15	3	0	Haywire,: Attenuating Damage 1, HEAT	Unl.
1	MMJ-4 Missile	F	-2	x20	5	0	Seeking 1, Smart 2	2
2	PL4 Plasma Lance	F	0	x20	Melee	0	Armor Crushing, Concealed, HEAT	LU5
Option	792R Particle Cannon	F	+1	x16	5	0	Haywire, HEAT, Attenuating Damage 1	30
Option	MD-5555 Massdriver	F	0	x20	10	1	Armor Piercing, Clumsy, Heavy	30

OGL STAT BLOCK

Type:	Giant Robot
Size:	Gargantuan (Tall, 15.4 m)
Hit Points:	66 (MP: 52)
Occupancy:	1 operator, no cargo (MP: 10)
Armor Hardness:	22 (MP: 110)
Defense:	6
Strength:	55 (+22) (MP: 135)
Speed:	Land 108 kph, Realistic Space Flight (Thrust 1.4g, G-Round 300) (MP: 154+924)
Tactical Speed:	Land 180 m
Initiative:	-2 (MP: 10)
Maneuver:	-2 (MP: 10)
Total MP Cost:	2594
Total Money Cost:	518,800 credits

Special Abilities:
Booster (Space, 2.8g, G-Round 100, MP: 616), Chobham Armor (MP: 22), Tactical Radio (Secure, MP: 4), Laser Com (Secure, Interplanetary, MP: 14), Laser and Radar Warning Receivers (MP: 4), Ejection Seat (MP: 3), Life Support (MP: 16), Searchlights (MP: 2), Jumping (x5, MP: 20), GPS (MP: 2), High Resolution Radar (Global, 5 km, MP: 30), Magnetic Sensor (2 km, MP: 6), Optics (2km, MP: 4), Infrared (2km, MP: 6), Stabilization Gear (MP: 10), Targeting Device (+1 Particle Cannon, MP: 5)
Exotic Abilities:
Limited A.I. (Dex3, Wis3, Cha1, MP: 35)
Mecha Defects:
Noisy (MP: -5), Reduced Endurance (1 day, MP: -15), Start Up Time (1 minute, MP: -2)

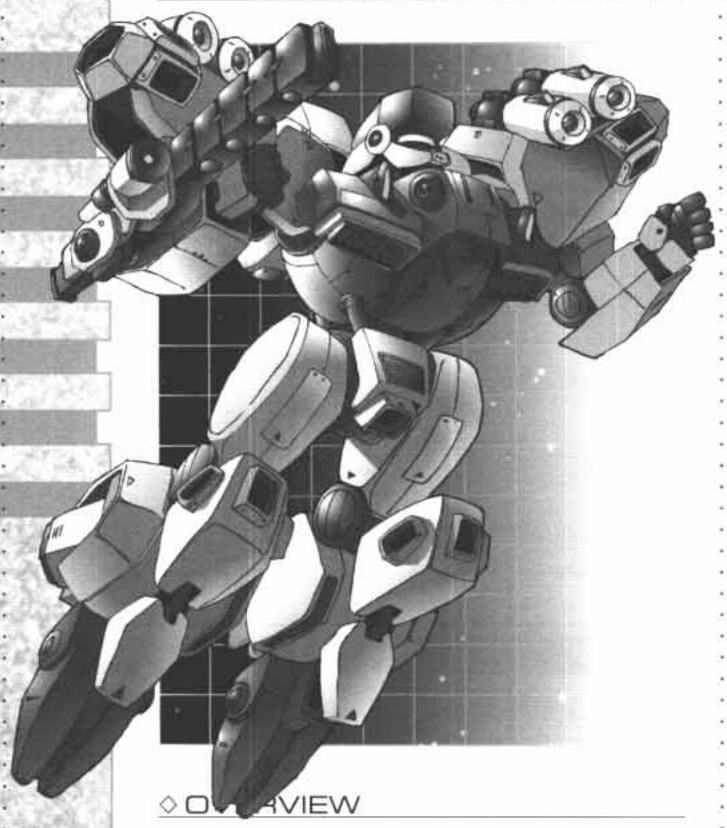
WEAPONS:

Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions	MP Cost
Particle Cannon*	8d12	SS	320m	n/a	Long Range, Unlimited Shots, Increased Threat (19-20)	Arc of Fire (Fr), Space-Optimized	(364)
MMJ-4 Missiles**	10d12	SS	800m	2	Armor Pen., Blast, Guided (IRH,ARH, LG), Indirect, 2x Long Range	Arc of Fire (Fr), 3x Less Ammo	(357)
Plasma Lances*	10d12	SS	n/a	10	Armor Penetrating, Concealed, Handheld, Increased Critical (x3)	Arc of Fire (Fr), 2x Less Ammo, Melee (Large)	(130)

NOTE: *Energy Weapons; **Blast Weapon. The particle cannon and missiles are Hardpoint-mounted.

7

▶ EAM-03A RETALIATOR



DATA

Name:	Retaliator Alpha
Production Code:	EAM-03A
Origin:	Jovian Confederation
Manufacturer:	Jovian Armor Works
Type:	Medium Exo-Armor
Role:	Anti-Ship Strike, Close Support, Interceptor, Tactical Strike
Control System:	Linear Frame
Height:	15.5 m
Width:	11.6 m
Empty Weight:	37.7 Tons
Loaded Weight:	42 Tons
Main Drive:	12 MW
Powerplant:	1598 KW
Main Thrusters:	4 x 20,000 kg, 2 x 8,000 kg
Apogee Motors:	20
Walking Speed:	66 kph
Acceleration:	2.4 g
Onboard Sensors:	Fire Control Radar, Infrared/Ultraviolet, Lidar, Low-light, Magnetometer, Microwaves, Motion Detectors,Radcounter, Telescope
Fixed Armament:	2 x PL4 Plasma Lances
Additional Armament:	JAW-11A Railgun, MMJ-4 Missiles, LMJ-2 Missiles
Defensive Systems:	Mag Screen
Equipment:	Escape Pod

◇ OVERVIEW

The Retaliator is the standard medium interception exo-armor of the JAF. Many of the actual Jovian exo-armor designs are based on this machine, as its reliability has been proved many times over (although it isn't entirely flawless: see below). Like its Jovian Armor Works siblings, the Pathfinder and the Vindicator, it has undergone an extensive redesign process in the aftermath of the Battle of Elys_e. Well-armed and fast for its size, the updated Retaliator Alpha can take on opponents bigger than itself and still come out on top. The Retaliator is commonly found in strike teams along with Pathfinders because of its high speed and heavy armament.

◇ CAPABILITIES

The machine is generally considered to lack proper armor considering its combat role. To ensure speed and maneuverability similar to that of light exo-armors while still carrying heavy armament, design compromises had to be made. The extra mass needed for weapons and thrusters came off the limbs' armor, much to the dismay of the pilots assigned to the machine. To save further mass, the engineers tried to reduce the size of the thrusters by using a new plasma injector cone which uses pre-heating to boost the output of the core. It worked, up to a point: since the verniers have to operate at near maximum level for extended periods of time, they tend to overheat, which used to cause shutdowns. Though the problem has been mostly solved on the Alpha, green pilots still burn out the thruster array on their first sortie with a Retaliator, despite repeated warnings from the technical crew.

The Retaliator is equipped with the powerful JAW-11 railgun, a proven modular design able to send a Lexan shell with metal sabot straight through several inches of composite armor. Early examples suffered many cases of jamming because of the rapid wear of the gun's rails, but the problem was solved during the redesign process by a young weapon expert called Gerard Vincennes, recently hired right out of school by the Armament Division at JAW. The redesigned 11A can now fire nearly ten clips before rail replacement, thanks to an innovative rail wear control technique developped by Vincennes.

SILCORE STAT BLOCK

Name:	EAM-03A RETALIATOR ALPHA
Size:	12 (Tall, 15.5 m)
*Defensive Threat Value (DTV)	
Movement:	Walk 6/11
Space 12/24	
Maneuver:	0
Armor:	26/56/78
*Miscellaneous Threat Value (MTV)	
Crew:	Living 1; Computer 1 (Dumb, Level 2)

Deployment Range:	450 Km
Reaction Mass:	400 BP
Perks and Flaws: Accessory: Autopilot, Life Support, Escape System; Arms: 2x Manipulator Arm 12; Hostile Environment Protection: Radiation 4, Vacuum; Reinforced Systems: Backups, Crew; Annoyance (Overheating thruster cones); Negative Feature: Large Sensor Profile 2	

*Offensive Threat Value (OTV)

Quantity	Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
1	JAW-11A Railgun	F	0	x16	5	0	Armor Piercing	20
1	LMJ4 Missile	F	-1	x16	2	0	Seeking 1, Smart 1	6
1	MMJ-4 Missile	F	-2	x20	5	0	Seeking 1, Smart 2	4
2	PL4 Plasma Lance	F	0	x20	Melee	0	Armor Crushing, Concealed, HEAT	LU5

OGL STAT BLOCK

Type:	Giant Robot
Size:	Gargantuan (Tall, 15.5 m)
Hit Points:	66 (MP: 52)
Occupancy:	1 operator, no cargo (MP: 10)
Armor Hardness:	26 (MP: 130)
Defense:	6
Strength:	55 (+22) (MP: 135)
Speed:	Land 99 kph, Realistic Space Flight (Thrust 1.2g, G-Round 250) (MP: 182+780)
Tactical Speed:	Land 165 m
Initiative:	-3 (MP: 5)
Maneuver:	-2 (MP: 10)
Total MP Cost:	2194
Total Money Cost:	438,800 credits

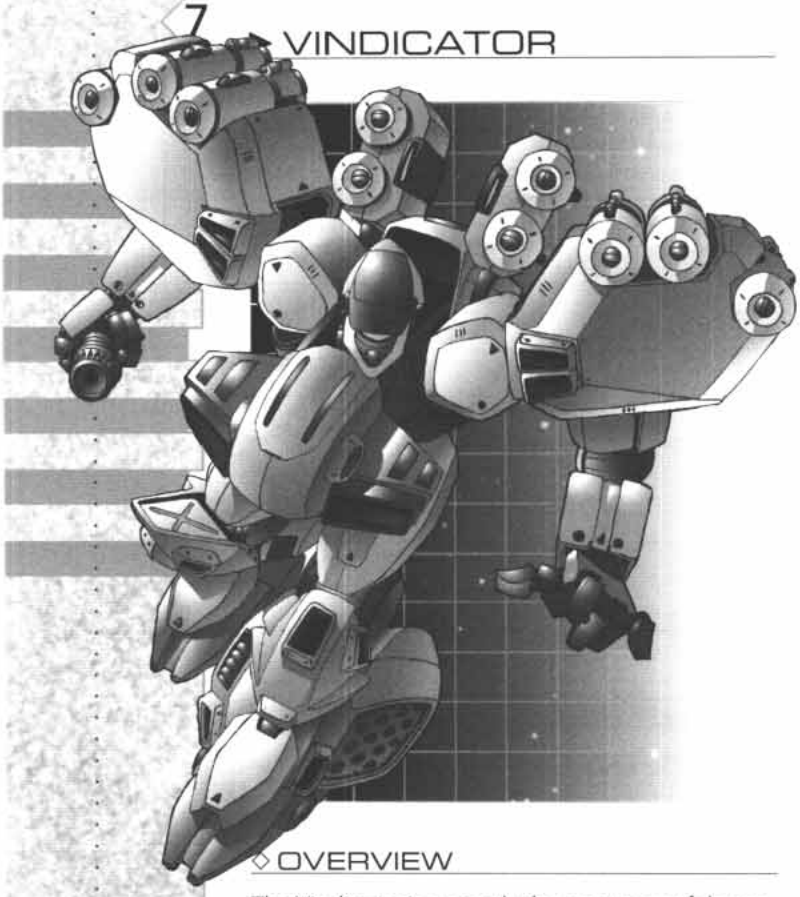
Special Abilities:
Booster (Space, 2.4g, G-Round 50, MP: 312), Chobham Armor (MP: 26), Tactical Radio (Secure, MP: 4), Laser Com (Secure, Interplanetary, MP: 14), Laser and Radar Warning Receivers (MP: 4), Ejection Seat (MP: 3), Life Support (MP: 16), Searchlights (MP: 2), Jumping (x5, MP: 20), GPS (MP: 2), Radar (2 km, MP: 30), Magnetic Sensor (2 km, MP: 6), Optics (2km, MP: 4), Infrared (2km, MP: 6), Stabilization Gear (MP: 10)
Exotic Abilities:
Limited A.I. (Dex3, Wis3, Cha1, MP: 35)
Mecha Defects:
Noisy (MP: -5), Reduced Endurance (1 day, MP: -15), Start Up Time (1 minute, MP: -2)

WEAPONS:

Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions	MP Cost
JAW-11A Railgun*	7d12	SS	560m	20	2x Long Range	Arc of Fire (Fr)	(182)
MMJ-4 Missiles**	10d12	SS	800m	4	Armor Penetrating, Blast, Guided (IRH,ARH, LG), Indirect, 2x Long Range	Arc of Fire (Fr), 3x Less Ammo	357
LMJ-4 Missiles**	7d12	SS	280m	6	Armor Penetrating, Blast, Guided ARH, LG), Indirect, Long Range	Arc of Fire (Fr), 2x Less Ammo	(303)
Plasma Lances*	10d12	SS	n/a	10	Armor Penetrating, Concealed, Handheld, Increased Critical (x3)	Arc of Fire (Fr), 2x Less Ammo, Melee (Large)	(130)

NOTE: *Ballistic Weapon; **Blast Weapon; ***Energy Weapons. The railgun and missiles are Hardpoint-mounted.

7 VINDICATOR



DATA

Name:	Vindicator Alpha
Production code:	EAH-01A
Origin:	Jovian Confederation
Manufacturer:	Jovian Armor Works
Type:	Heavy Exo-Armor
Role:	Anti-Ship Strike, Assault Transport, Fighter, Tactical Strike
Control System:	Linear Frame
Height:	16.4 m
Width:	14.7 m
Empty Weight:	65.7 Tons
Loaded Weight:	70 Tons
Powerplant:	1970 KW
Main Drive:	25 MW
Apogee Motors:	20
Walking Speed:	36 kph
Acceleration:	1.8 g
Onboard Sensors:	Fire Control Radar, Infrared/Ultraviolet, Lidar, Low-light, Magnetometer, Microwaves, Motion Detectors,Radcounter, Telescope
Fixed Armament:	2 x Jovian Optics AM-1 Anti-Missile System, 3 x PL3B Plasma Lances
Additional Armament:	JAW-15 Massdriver w/Jovian Optics 54L Laser Cannon, HMJ-6 Missiles, LMJ-1 Missiles
Defensive Systems:	Mag Screen
Equipment:	Escape Pod

◇ OVERVIEW

The Vindicator is currently the most powerful mass-produced exo-armor in the solar system. Because of its high cost, it is usually assigned to proven pilots or squadron commanders only. The massive armament and armor it carries gives the Vindicator a tremendous advantage in combat.

The Vindicator program was started only two years ago, in 2208, as a direct result of the introduction of the Wyvern by CEGA. The JAF's generals felt that since the Wyvern was nearly the equal of the Retaliator in combat, they needed an even more powerful unit to stay in the forefront of the arm race — the Vindicator is such a machine.

◇ CAPABILITES

Although a bit slow, the exo's massive light missile batteries (located on the side of its legs) can easily overwhelm most close defense systems. The heavy warheads carried on the shoulders and in the backpack can be used to destroy or severely cripple small ships or damage large ones. A pair of Jovian Optics anti-missile turrets guard the exo against return fire. Its most impressive weapon, however, is the massdriver/laser assembly mounted on the right arm. The presence of a non-ammunition based weapon extends the combat endurance of the Vindicator, enabling it to get rid of small threats while saving the precious massdriver ammunition for more important targets.

If the Vindicator had only those qualities, it would indeed be king of the battlefield. Unfortunately, the development was rushed, leaving minor flaws in some of the systems. For example, due to a powerplant sensor malfunction, an overheat warning sounds every time the pilot pushes his machine above the normal operating parameters. Veterans are now used to the problem, simply disabling the sensor and relying on their "gut instinct" instead. The Vindicator is also painfully slow compared to other, smaller machines.

Since the Vindicator is a relatively new design, no variants were built as of 2210. There are plans for a commander-type version, but production is not expected to begin until late 2212. If the machine proves successful in service, it will probably be adapted to a variety of operational roles such as interception, heavy assault and hunter/killer.

SILCORE STAT BLOCK

Name:	EAH-O1A VINDICATOR ALPHA
Size:	14 (Tall, 16.4 m)
*Defensive Threat Value (DTV)	
Movement:	Walk 3/5
	Space 9/18
Maneuver:	0
Armor:	32/64/96
*Miscellaneous Threat Value (MTV)	
Crew:	Living 1; Computer 1 (Dumb, Level 2)

Deployment Range:	700 Km
Reaction Mass:	750 BP
Perks and Flaws: Accessory: Autopilot, Life Support, Escape System; Armor Quality: HEAT Resistant 4; Arms: 2x Manipulator Arm 14; Hostile Environment Protection: Radiation 4, Vacuum; Reinforced Systems: Backups, Crew; Negative Feature: Large Sensor Profile 2	

*Offensive Threat Value (OTV)

Quantity	Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
1	JAW-15 Massdriver	F	0	x20	5	5	-	50
1	JO 54L Laser Cannon	F	0	x10	8	0	HEAT, Attenuating Damage 1	Unl.
1	HMJ-6 Heavy Missile	F	-2	x30	5	0	Seeking 1, Smart 2	10
2	LMJ-1 Light Missile	F	-1	x10	3	5	Guided	20
3	PL-3B Plasma Lance	F	0	x20	Melee	0	Armor Crushing, Concealed, HEAT	LU5
2	AM-1 Anti-missile System	F	+1	x5	1	5	Anti-Missile, HEAT	Unl.

OGL STAT BLOCK

Type:	Giant Robot
Size:	Gargantuan (Tall, 16.4 m)
Hit Points:	72 (MP: 72)
Occupancy:	1 operator, no cargo (MP: 10)
Armor Hardness:	26 (MP: 130)
Defense:	6
Strength:	65 (+37) (MP: 165)
Speed:	Land 45 kph, Realistic Space Flight (Thrust 0.9g, G-Round 450) (MP: 78+1053)
Tactical Speed:	Land 75 m
Initiative:	-3 (MP: 5)
Maneuver:	-2 (MP: 10)
Total MP Cost:	3382
Total Money Cost:	676,400 credits

Special Abilities:
Booster (Space, 1.8g, G-Round 150, MP: 702), Chobham Armor (MP: 26), Tactical Radio (Secure, MP: 4), Laser Com (Secure, Interplanetary, MP: 14), Laser and Radar Warning Receivers (MP: 4), Ejection Seat (MP: 3), Life Support (MP: 16), Searchlights (MP: 2), Jumping (x5, MP: 20), GPS (MP: 2), Radar (2 km, MP: 30), Magnetic Sensor (2 km, MP: 6), Optics (2km, MP: 4), Infrared (2km, MP: 6), Stabilization Gear (MP: 10)
Exotic Abilities:
Limited A.I. (Dex3, Wis3, Cha1, MP: 35)
Mecha Defects:
Noisy (MP: -5), Reduced Endurance (1 day, MP: -15), Start Up Time (1 minute, MP: -2)

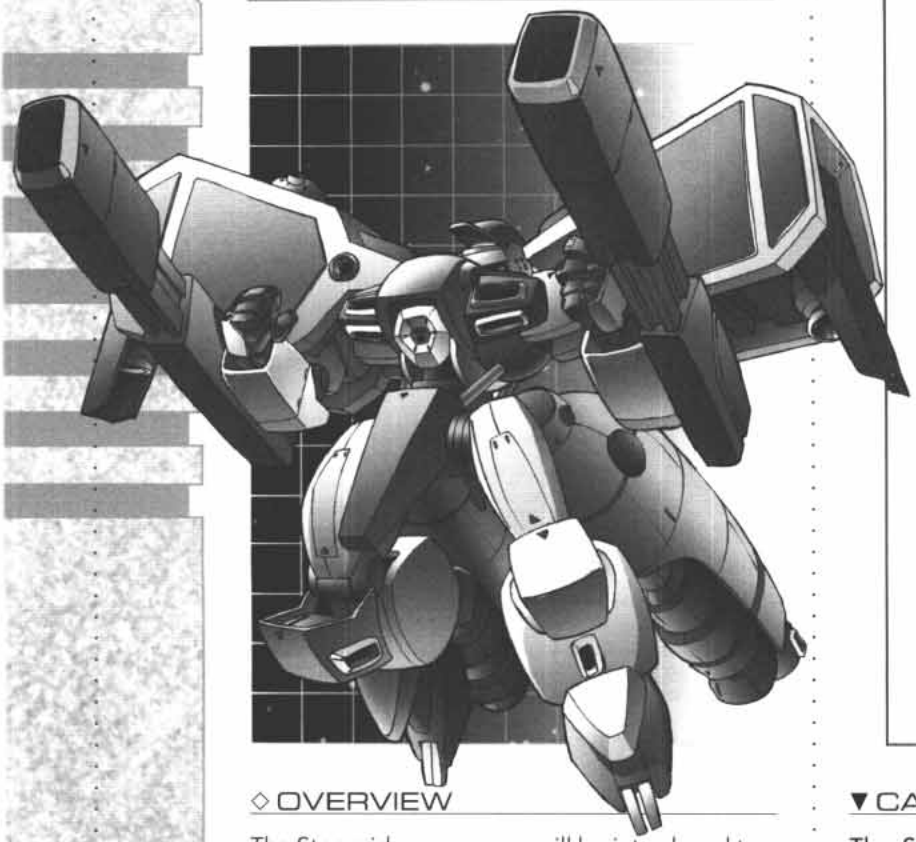
WEAPONS:

Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions	MP Cost
JAW-15 Massdriver*	10d12	A	800m	50	2x Long Ransge, Extra Ammo	Arc of Fire (Fr)	(346)
Laser Cannon***	5d12	SS	800m	n/a	3x Long Range, Unlim. Shots	Arc of Fire (Fr)	(346)
HMJ-6 Missiles**	12d12	SS	960m	10	Armor Penetrating, Blast, Guided (IRH,ARH, LG), Indirect, 2x Long Range	Arc of Fire (Fr), Less Ammo	858
LMJ-1 Missiles**	5d12	SS	200m	40	Armor Pen., Blast, Extra Ammo, Guided(IRH, ARH, LG), Indirect, Long Range	Arc of Fire (Fr)	(476)
Plasma Lances*	10d12	SS	n/a	10	Armor Penetrating, Concealed, Handheld, Increased Critical (x3)	Arc of Fire (Fr), 2x Less Ammo, Melee (Large)	(130)
Anti-Missile Syst.***	4d6	A	72m	n/a	Cone, Long Range, Unlimited Shots	Arc of Fire (Fr), Low Penetration	(112)

NOTE: *Ballistic Weapon; **Blast Weapon; ***Energy Weapons. The massdriver/laser and heavy missiles are Hardpoint-mounted.

7

▶ STORMRIDER



DATA

Name:	Stormrider
Production Code:	EAH-07
Origin:	Jovian Confederation
Manufacturer:	Prometheus Project
Type:	Heavy Assault Unit
Role:	Anti-Ship Strike, Interceptor, Tactical Strike
Control System:	Linear Frame
Length:	15.6 m
Width:	18 m
Empty Weight:	35 Tons
Loaded Weight:	50 Tons
Main Drive:	40 MW
Secondary Powerplant:	4900 KW
Apogee Motors:	46
Ground Speed:	60 kph
Acceleration:	3.0 g
Onboard Sensors:	Fire Control Radar, Infrared/Ultraviolet, Ladar, Magnetometer, Microwaves, Motion Detectors, Radcounter, Telescope, Thermograph
Fixed Armament:	2 x Beam Cannon, 1 x Missile Delivery System, 1 x Scatter Launcher
Additional Armament:	2 x Plasma Lance
Defensive Systems:	AM Laser Turrets, Mag Screen, Electronic Counter-Measure System
Equipment:	Escape Pod, Decoy System

◇ OVERVIEW

The Stormrider exo-armor will be introduced to a full-scale production line and inclusion in the JAF somewhere between 2213 and 2215. One of the last designs to leave the Prometheus Project's doors, the Stormrider is a mishmash of lessons learned by the Prometheus teams in the course of their marathon in exo-design innovation. It closely resemble the Storm Attacker configuration of the original Prometheus prototypes, though all the armament is permanently attached. The Prometheus' beam scatter launcher, deemed too costly, has been replaced by a more primitive "shotgun" type projectile-based model.

Although a less expensive model than the related Prometheus Tetra test design (which got out of fiscal control during the early development stages), the Stormrider is still very much a prototype machine. Its effectiveness in the field, however, makes it worth its high cost — whatever skepticism the Agora's military committee may hold. For the first few years, the Stormrider will only be used by aces and high-ranking officers due to its need for special bay accomodations as well as the nearly double helping of fuel, ammunition, and downtime in comparison to common trooper units.

▼ CAPABILITIES

The Stormrider is primarily an assault unit: it bristles with weaponry, and indeed its armament requires computer assistance to use effectively. It has been designed to engage the enemy at all ranges, and do so on the very edge of the interception envelope. This is made possible by two large rear-mounted propulsion units, whose combined thrust propel the exo-armor at nearly three gravities of acceleration (albeit for only a short period of time). These are similar to the boosters used by the Hector variant of the Pathfinder, simplifying maintenance.

The main armament is composed of a battery of two high-yield particle cannons mounted on the forearms of the unit for a maximal field of fire. These are backed by a scatter launcher located on the main torso, right in front of the cockpit access hatch. To overwhelm fast targets, two large missile launchers are located on the shoulders and slaved to the same control system. For close combat, a pair of standard plasma lances are located under leg panels. For additional protection, the Stormrider is equipped with ECM pods, decoy launchers, and a series of small beam emitters to take care of incoming missiles.

SILCORE STAT BLOCK

Name:	EAH-07 STORMRIDER
Size:	12 (Tall, 15.6 m)
*Defensive Threat Value (DTV)	
Movement:	Walk 5/10
	Space 15/30
Maneuver:	Walk 0 / Space +1
Armor:	24/48/72
*Miscellaneous Threat Value (MTV)	
Crew:	Living 1; Computer 2 (Dumb, Level 3)

Deployment Range:	750 Km
Reaction Mass:	500 BP
Perks and Flaws: Accessory: Autopilot, Life Support, Escape System; Armor Quality: HEAT Resistant 5; Arms: 2x Manipulator Arm 12; Hostile Environment Protection: All, Radiation 5; Information Warfare Devices: Electronic Counter Measures 2, Decoy System 2, Stealth 2; Reinforced Systems: Backups, Crew; Movement Flaw: Decreased Maneuver 1	

*Offensive Threat Value (OTV)

Quantity	Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
2	Beam Cannon	F	+1	x15	5	0	Haywire, HEAT, Attenuating Damage 1	Unl.
1	MMJ-2LR Missile	F	-2	x10	6	0	Seeking 1	16
1	Scatter Launcher	FF	+1	x10	3	2	Scatter	10
1	AM Laser Turret Network	T	+2	x2	1	6	Anti-Missile, HEAT, Smart 1, Defensive	Unl.
2	Plasma Lance	F	0	x12	Melee	0	Armor Crushing, Concealed, HEAT	LU5

OGL STAT BLOCK

Type:	Giant Robot
Size:	Gargantuan (Tall, 15.5 m)
Hit Points:	66 (MP: 52)
Occupancy:	1 operator, no cargo (MP: 10)
Armor Hardness:	25 (MP: 125)
Defense:	6
Strength:	55 (+22) (MP: 135)
Speed:	Land 90 kph, Realistic Space Flight (Thrust 1.5g, G-Round 250) (MP: 150+937)
Tactical Speed:	Land 150 m
Initiative:	-2 (MP: 10)
Maneuver:	-2 (MP: 10)
Total MP Cost:	4494
Total Money Cost:	898,800 credits

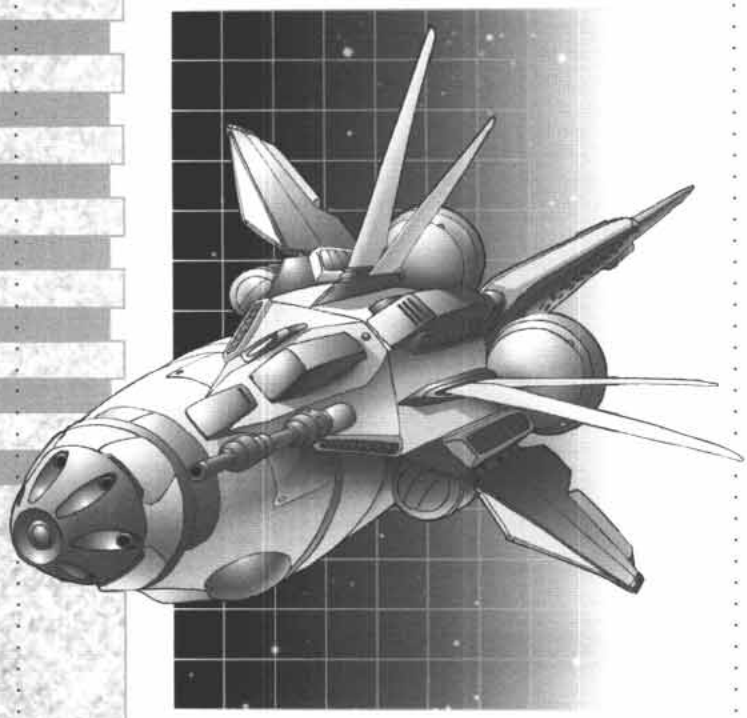
Special Abilities:
Booster (Space, 3g, G-Round 50, MP: 375), Chobham Armor (MP: 24), Tactical Radio (Secure, MP: 4), Laser Com (Secure, Interplanetary, MP: 14), Laser and Radar Warning Receivers (MP: 4) , Radar & Radio Jammer (+2, MP: 24), Ejection Seat (MP: 3), Life Support (MP: 16), Searchlights (MP: 2), Jumping (x5, MP: 20), GPS (MP: 2), Radar (2 km, MP: 30), Magnetic Sensor (2 km, MP: 6), Optics (2km, MP: 4), Infrared (2km, MP: 6), Stabilization Gear (MP: 10), Stealth (Radar +2, Infrared +2, MP: 12), Targeting Device (Beam Cannons, +1, MP: 5)
Exotic Abilities:
Limited A.I. (Dex6, Wis6, Cha1, MP: 65)
Mecha Defects:
Noisy (MP: -5), Reduced Endurance (1 day, MP: -15), Start Up Time (1 minute, MP: -2)

WEAPONS:

Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions	MP Cost
Beam Cannons*	8d12	S	640m	n/a	2x Long Range, Increased Threat (19-20), Unlimited Shots	Arc of Fire (Fr)	485
Scatter Launcher*	5d12	SS	200m	10	Cone, Long Range	Arc of Fire (Fr)	(173)
MMJ-2LR Missiles** (390)	6d12	SS	480m	16	Armor Penetrating, Blast, Guided	(IRH, ARH, LG), Arc of Fire (Fr), Less Ammo, Indirect, 2x Long Range	
AM Turrets*	4d6	S	36m	n/a	Semiauto, Unlimited Shots	—	(140)
Plasma Lances*	10d12	SS	n/a	10	Armor Penetrating, Concealed, Handheld, Increased Critical (x3)	Arc of Fire (Fr), 2x Less Ammo, Melee (Large)	(130)
NOTE: *Energy Weapons; **Blast Weapons.							

7

▶ IM-09 LANCER



DATA

Name:	Lancer
Production Code:	IM-09
Origin:	Jovian Confederation
Manufacturer:	Olympus Aerospace
Type:	medium interceptor
Role:	Anti-Ship Strike, Fighter, Interceptor, Tactical Strike
Control System:	Standard Cockpit
Length:	16.4 m
Width:	10 m
Empty Weight:	45.7 Tons
Loaded Weight:	50 Tons
Main Drive:	2 x 24.6 MW
Secondary Powerplant:	1970 KW
Main Thrusters:	2 x 80,000 kg
Apogee Motors:	16
Ground Speed:	0 kph
Acceleration:	3.2 g
Onboard Sensors:	Fire Control Radar, Infrared/Ultraviolet, Ladar, Magnetometer, Microwaves, Motion Detectors, Radcounter, Telescope, Thermograph
Fixed Armament:	2 x Missile Racks
Additional Armament:	Railgun, Laser Gun, Various Missiles
Defensive Systems:	Mag Screen, Active Counter-Measure System
Equipment:	Escape Pod

◇ OVERVIEW

Interceptors remain an important part of most modern space navies. They are simpler to maintain than the complex exo-armors and are generally capable of higher acceleration, though their endurance and maneuverability are inherently limited. The IM-09 Lancer is the most common Jovian Armed Forces interceptor as of 2210, where it constitutes about half the total number of interceptors in service.

The Lancer was designed around paired fusion drives located at the back, under the large dorsal fin. The reliable Nakasu 423M PCC engines provide the craft with good acceleration even when carrying a full combat payload, making it appreciated by pilots and commanders alike. Like all spacecraft of its type, though, the Lancer suffers from poor range due to its limited on-board reaction mass reserve.

◇ CAPABILITIES

The most obvious feature of the Lancer is the large payload module attached to its belly. The Advanced Tactical Mission Pod (ATMP) is a modular pod system designed to increase the mission versatility of the vehicle. Most of the offensive payload is carried within the pod, which can be exchanged for a new one within minutes by a trained crew.

The hull is covered with numerous protusions, all of which have a specific function. The large blades along the upper mainframe are an extensive antennae array which the craft uses for both sensor and communication purposes. Crewmen sometimes refer to them as "whiskers." The rear section features twin reaction mass tanks which are armored separately to reduce the chance of a fatal leak due to combat damage. Finally, the long dorsal boom mounts two important systems, an array of heatsinks and the countermeasure launcher known as the Active Counter-Measure System (ACMS).

Because of the flexibility of the ATMP mission pod system, the Lancer has no true variant. Though the model has gone through several updates and refits during its service life, there have been no significant changes to the frame or the performance of the vehicle.

SILCORE STAT BLOCK

Name:	IM-09 LANCER
Size:	10 (Long, 24.8 m)
*Defensive Threat Value (DTV)	
Movement:	Space 16/32
Maneuver:	-2
Armor:	20/40/60
*Miscellaneous Threat Value (MTV)	
Crew:	Living 1; Computer 1 (Dumb, Level 2)
Deployment Range:	100 Hrs

Reaction Mass:	200 BP
Perks and Flaws: Accessory: Autopilot, Life Support, Escape System; Feature: Easy to Modify (Fire Control); Hostile Environment Protection: Radiation 4, Vacuum; Reinforced Systems: Backups, Crew	

*Offensive Threat Value (OTV)

Quantity	Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
1	Counter-Measure Syst.	T	+2	x6	1	4	Anti-Missile, Smart 1, Defensive	120
2	Wing Launched Missile	FF	-1	x15	3	0	Guided	5
1	MMJ-2LR Missile	FF	-2	x10	6	0	Seeking 1	12
1	HMJ-6 Heavy Missile	FF	-2	x30	5	0	Seeking 1	4
Option	QFS Laser	FF	+1	x12	4	0	HEAT, Attenuating Damage 1	Unl.
Option	RJ-56 Rocket Pod	FF	-2	x10	3	4	Indirect Fire	20
Option	MMJ-4 Missile	FF	-2	x20	5	0	Seeking 1, Smart 2	Option

OGL STAT BLOCK

Type:	Vehicle
Size:	Gargantuan (Long, 24.8 m)
Hit Points:	60
Occupancy:	1 operator, no cargo
Armor Hardness:	20
Defense:	n/a
Strenght:	n/a
Speed:	Realistic Space Flight (1.8 g, G-round 40)
Tactical Speed:	n/a
Initiative:	-3
Maneuver:	-4

Special Abilities:
Booster (Space 3.2 g, G-Round 20), Comm (LR Radio, Laser Comm, Microwave; Secure), ECM (Missile Jammer +6), Ejection Seat, Laser and Radar Warning Receivers, Life Support, Nav System (GPS), Sensors (Optics, Low-Light, Hi-res Radar, Magnetic; all 2 km), Stabilization Gear
Exotic Abilities: Limited A.I. (Dex 3, Wis 3, Cha 1)
Mecha Defects: Reduced Endurance (few days), Start Up Time (1 minute)

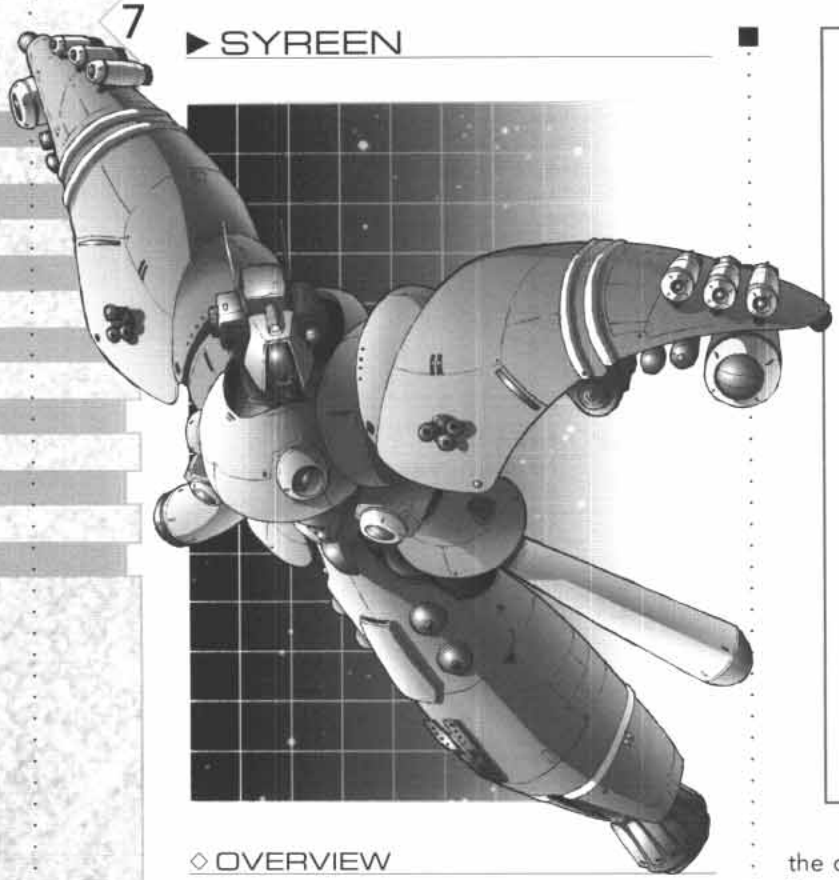
Weapons:

Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions
Light Missiles*	4d12	A	160m	12	AP, Blast, Guided (IRH, ARH, LG), Indirect	Arc of Fire (Front)
Med. Missiles*	8d12	A	320m	2	AP, Blast, Guided (IRH, ARH, LG), Indirect	Arc of Fire (Front)
Hvy. Missiles*	12d12	A	280m	4	AP, Blast, Guided (IRH, ARH, LG), Indirect	Arc of Fire (Front)

NOTE: *Blast

7

▶ SYREEN



DATA

Name:	Syreen
Production Code:	CEA-01
Origin:	Central Earth Government & Administration
Manufacturer:	Lunar Aerospace Consortium
Type:	Space Exo-Armor
Role:	Anti-Ship Strike, Interceptor, Tactical Strike
Control System:	Linear Frame
Height:	17.2 m
Width:	17.5 m
Empty Weight:	46.9 Tons
Loaded Weight:	52 Tons
Main Drive:	32 MW
Powerplant:	1203 KW
Main Thrusters:	1 x 156,000 kg
Apogee Motors:	18
Ground Speed:	n/a
Acceleration:	3 g
Onboard Sensors: ECCM, Fire Control Radar, Infrared/Ultraviolet, Lidar, Low-light, Magnetometer, Microwaves, Motion Detectors, Radcounter, Telescope	
Fixed Armament:	1 x LACW-12S ACDLS
Additional Armament:	2 x CSH-4 Heavy Missiles, 6 x Deathsong A3 Medium Missiles, 4 x LAC-1 Light Missiles
Defensive Systems:	Mag Screen
Equipment:	Escape Pod

◇ OVERVIEW

As the settlements resumed contact with Earth, the newly formed CEGA was amazed by the new war machines they saw. They were a little worried as well. The Syreen was hastily designed to be a stopgap measure to the recent colonial advances in exo-armor technology. Using an old OTV (Orbital Transfer Vehicule) model, the CEGA technicians built a legless and crude craft capable of defending itself in hand-to-hand combat as well as carrying anti-spacecraft missiles.

After several successful simulated ambushes in the Asteroid Belt, the vehicle was dubbed Syreen for its appearance and its ability to lure opponents into a well-prepared trap using its ECM pod. The pod was too costly to use on all exos, so it was later decided that only the officer variant would carry it on the production model.

◇ CAPABILITIES

Although actual production models use a custom designed booster, the original prototypes of 2186 were built around decommissioned OTVs. This caused endless problems (as well as one explosion) before the project leaders finally decided to build a new chassis for the vehicles. Because of the original nature of its propulsion system, the Syreen is capable of high acceleration, but suffers from poor range and maneuverability. The latter was improved by the addition of vectoring plates to the main nozzle. These plates need constant attention however, and many technicians complain they are spending too much time on them.

The most amazing piece of equipment is surely the Active Close Defense Laser System (ACDLS for short), a computer-guided, variable range laser array composed of four independently focusing lenses. These serve as the Syreen's main ranged weapon, except when an opponent approaches the Syreen within 25 meters: the computer then automatically takes over and fires at the new threat. This is beginning to cause problems as Syreens sometimes open fire on friendly units, acting on misread IFF signals.

Being a jury-rigged machine built with the intention that it be replaced by more advanced designs, the Syreen was never adapted to other operational roles. The Commander type, which carries an ECM pod, was the only variation built.

SILCORE STAT BLOCK

Name:	CEA-01 SYREEN
Size:	12 (Tall, 17.2 m)
*Defensive Threat Value (DTV)	
Movement:	Space 15/30
Maneuver:	-2
Armor:	22/44/66
*Miscellaneous Threat Value (MTV)	
Crew:	Living 1; Computer 1 (Dumb, Level 1)
Deployment Range:	300 Hrs

Reaction Mass:	350 BP
Perks and Flaws: Accessory: Autopilot, Life Support, Escape System; Arms: 2x Manipulator Arm 10; Hostile Environment Protection: Radiation 3, Vacuum; Information Warfare Devices: Electronic Counter Counter Measures 3; Reinforced Systems: Backups, Crew; Weakness: Fragile Chassis, Hazardous Ammo/Fuel; Negative Feature: Difficult to Modify (Movement), Large Sensor Profile 3	

*Offensive Threat Value (OTV)

Quantity	Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
1a	ACDLS [range]	F	0	x12	3	2	HEAT, Attenuating Damage	Unl.
1b	ACDLS [defense]	F	0	x16	Melee	0	HEAT, Smart 1	Unl.
1	LAC-1	F	+1	x5	1	0	Guided, Indirect Fire	4
1	A3 Missile	F	0	x15	3	0	Guided, Indirect Fire	6
1	CSH4 Missile	F	-1	x25	5	0	Guided, Indirect Fire	2

OGL STAT BLOCK

Type:	Giant Robot
Size:	Gargantuan (Tall, 17.2 m)
Hit Points:	40 (MP: 0)
Occupancy:	1 operator, no cargo (MP: 10)
Armor Hardness:	22 (MP: 110)
Defense:	6
Strength:	45 (+27) (MP: 105)
Speed:	Realistic Space Fligh (Thrust 1.5g, G-Round 250) (MP: 825)
Tactical Speed:	n/a
Initiative:	-4 (MP: 0)
Maneuver:	-4 (MP: 0)
Total MP Cost:	2456
Total Money Cost:	491,200 credits

Special Abilities:
Booster (Space, 3g, G-Round 50, MP: 330), Tactical Radio (Secure, MP: 4), Laser Com (Secure, Interplanetary, MP: 14), Laser and Radar Warning Receivers (MP: 4), Defensive Jammer (+4, MP: 12), Ejection Seat (MP: 3), Life Support (MP: 16), GPS (MP: 2), Radar (2 km, MP: 30), Magnetic Sensor (2 km, MP: 6), Optics (2km, MP: 4), Infrared (2km, MP: 6), Stabilization Gear (MP: 10)
Exotic Abilities:
Limited A.I. (Dex3, Wis1, Cha1, MP: 25)
Mecha Defects:
Noisy (MP: -5), Reduced Endurance (1 day, MP: -15), Start Up Time (1 minute, MP: -2)

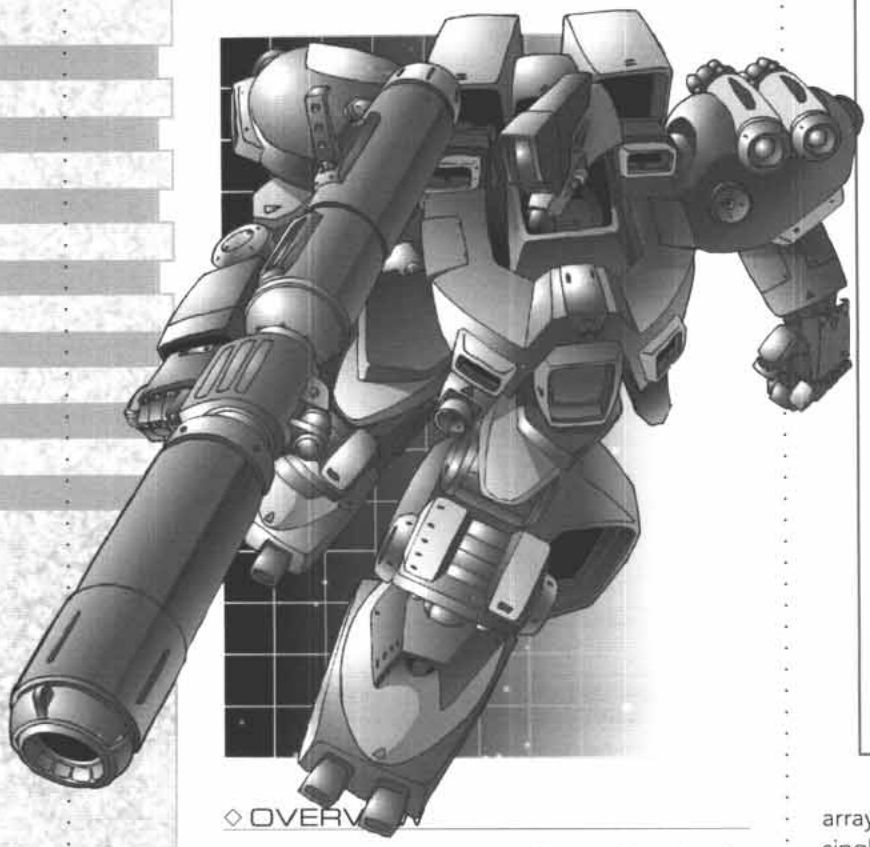
WEAPONS:

Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions	MP Cost
ACDLS Laser Mode*	4d12	S	160m	n/a	Long Range, Semiauto, Unlimited Shots	Arc of Fire (Fr)	(208)
ACDLS Melee Mode*	5d12	SS	n/a	n/a	Unlimited Shots	Arc of Fire (Fr), Melee	(130)
LAC-1 Missiles**	5d12	SS	100m	4	Armor Penetrating, Blast, Guided, (IRH, ARH, LG), Indirect	Arc of Fire (Fr)	(390)
A3 Missiles**	10d12	SS	400m	4	Armor Penetrating, Blast, Guided (IRH, ARH, LG), Indirect, Long Range	Arc of Fire (Fr), 3x Less Ammo	(325)
CSH-4 Missiles**	12d12	SS	960m	10	Armor Penetrating, Blast, Guided (IRH,ARH, LG), Indirect, 2x Long Range	Arc of Fire (Fr), Less Ammo	858

NOTE: *Energy Weapon; **Blast Weapons. The missiles are Hardpoint-mounted.

7

▶ WYVERN



DATA

Name:	Wyvern
Production Code:	CEA-05
Origin:	Central Earth Government & Administration
Manufacturer:	Lunar Aerospace Consortium
Type:	Trooper Exo-Armor
Role:	Anti-Ship Strike, Assault, Counter-Insurgency, Fighter
Control System:	Linear Frame
Height:	16.9 m
Width:	13.7 m
Empty Weight:	52.4 Tons
Loaded Weight:	55 Tons
Main Drive:	2 x 11.4 MW
Powerplant:	1712 KW
Main Thrusters:	5 x 20,000 kg, 2 x 16,000 kg
Apogee Motors:	12
Walking Speed:	36 kph
Acceleration:	2.4 g
Onboard Sensors:	Audio, Fire Control Radar, Infrared/Ultraviolet, Lidar, Low-light, Magnetometer, Microwaves, Motion Detectors,Radcounter, Telescope
Fixed Armament:	1 x Zapper Mk 2 Anti-Missile system, 2 x LACW-1M massdrivers
Additional Armament:	LACW-8 Hypergolic Bazooka, 2 x 3MC-2 Rocket Canisters, 2 x 3M-3 Missiles
Defensive Systems:	Mag Screen
Equipment:	Escape Pod, Searchlights

◇ OVERVIEW

As the Retaliator was gradually introduced in the JAF's front line units, the CEGA Council decided they needed a more modern exo-armor design to face it. Although efficient, the few updates of the Syreen were hopelessly outclassed, so research was oriented in a new direction. A new exo-armor would be designed from the ground up, though shortcuts would have to be taken to ensure that it could enter service as soon as possible.

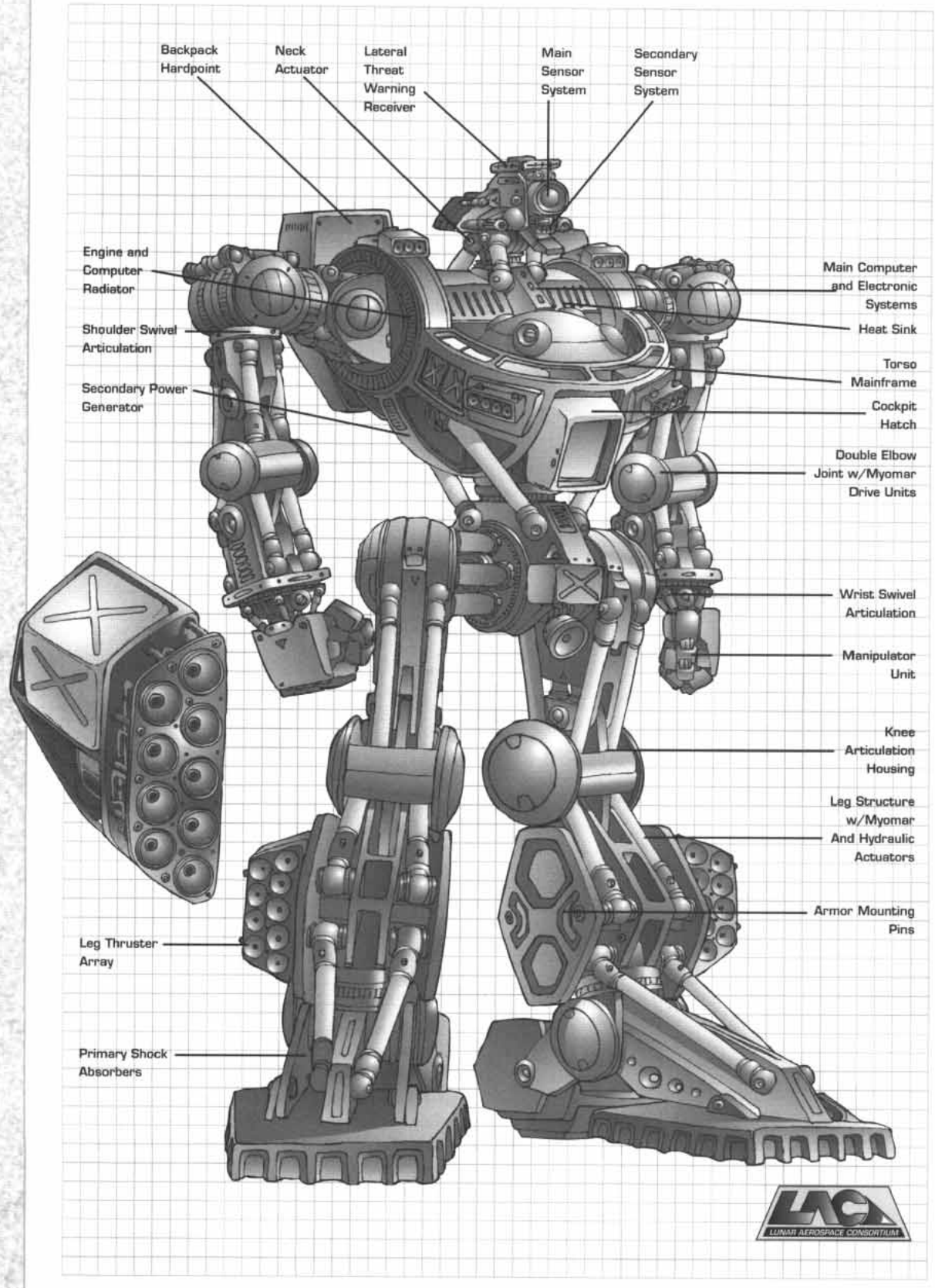
First, arrangements were made with the Martian Federation to buy two of their old Defenders. These were moved with great secrecy to the Lunar Aerospace Consortium base in the Tycho Crater to be disassembled and studied. Then, using the basic frame as a guide, the engineers set out to create an exo-armor which could stand against current Jovian designs and win. They knew they could not compete with the Jovian in terms of maneuverability, so the project focused on the dual objectives of armor and firepower.

◇ CAPABILITIES

The head unit was completely redesigned. The engineers removed the front and lateral sensor arrays of the Defender and replacing them with a single large plate. Although this limited the field of vision of the pilot somewhat, it made the sensors easier to maintain and made room for an anti-missile laser system as well as two light massdrivers for close combat. The armor plate covering the Defender's neck unit was retained for additional protection.

It was decided that a large hypergolic launcher would provide the main firepower, even if the ammunition supply would be limited. Unfortunately, the planned hip-mounted missiles had to be dropped because of mass restrictions. The leg-mounted missile canister design was retained, but the light rockets were more powerful than the ones found on the Martian vehicle. A pair of medium missiles, now carried on the left shoulder hardpoint, completes the basic armament. All of the vehicle's hardpoints are semi-modular and can be modified, if need be, to handle other types of ordnance.

Although the Wyvern is a recent design, several variations are already into production in an effort to modernize the Armed Forces. At the present rate of production, it is likely that the Wyvern will not replace the faithful Syreen for at least a few years.

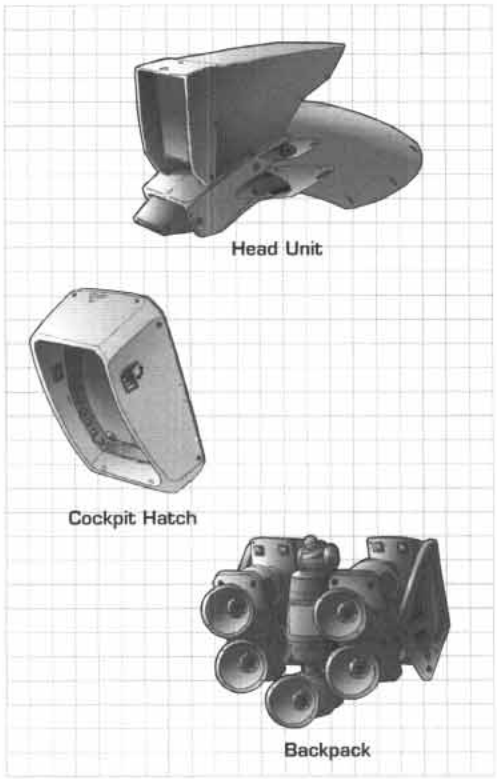

Backpack Hardpoint
Neck Actuator
Lateral Threat Warning Receiver
Main Sensor System
Secondary Sensor System
Engine and Computer Radiator
Shoulder Swivel Articulation
Secondary Power Generator
Main Computer and Electronic Systems
Heat Sink
Torso Mainframe
Cockpit Hatch
Double Elbow Joint w/Myomar Drive Units
Wrist Swivel Articulation
Manipulator Unit
Knee Articulation Housing
Leg Structure w/Myomar And Hydraulic Actuators
Armor Mounting Pins
Leg Thruster Array
Primary Shock Absorbers
LAC
LUNAR AEROSPACE CONSORTIUM

7

▼ PILOT'S COMMENTS

"The first thing that strikes you about the Wyvern is how big it is. The hatch is nearly ten meters up in the air, though in space it doesn't matter much. The hatch release panel is located about two-thirds of the way up on the right hand side of the hatch collar. Pull on the main release lever, and the hatch will open. This can be locked from the inside once you're settled in. Actually getting into the cockpit is always difficult because of the small size of the entry hatch. It garantees back problems after a while.

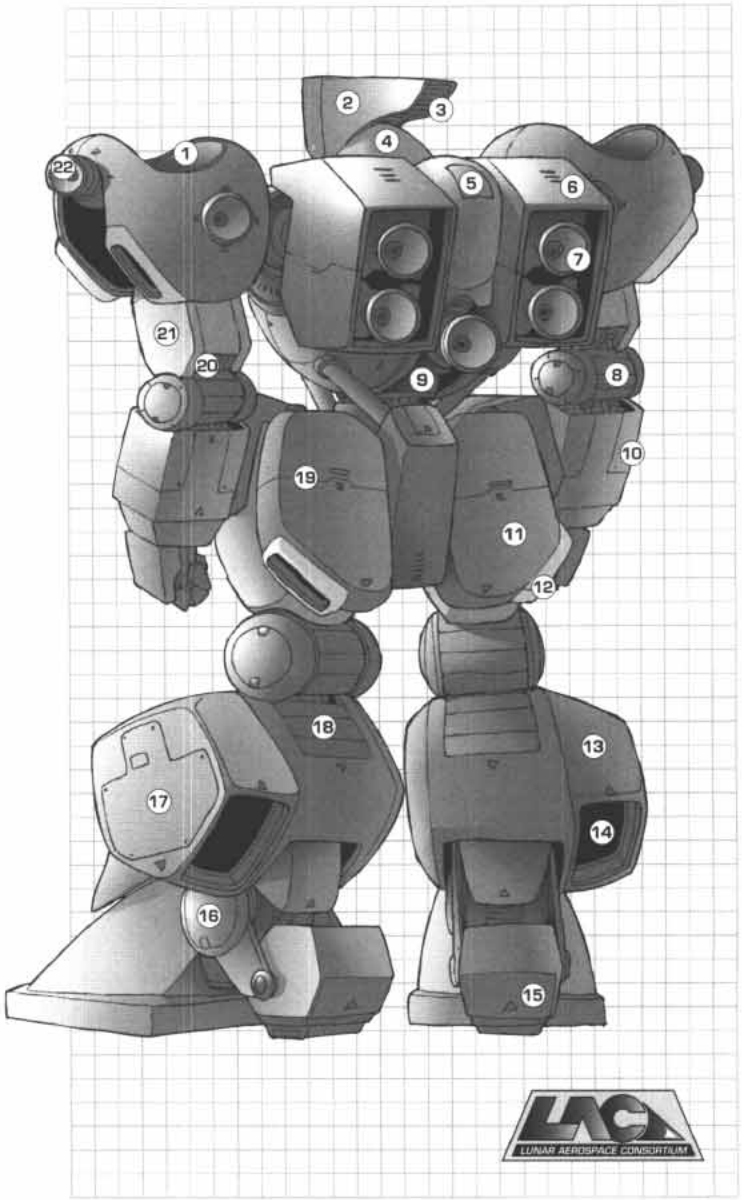
"You have to be careful not to step on the various monitors that form the inner layers of the cockpit. There are four small plates marked "step here" to do just that. Once you're in, grab the handle on the linear frame and swing in. Start strapping yourself from the bottom up, making sure that both feet are well secured before moving up. Don't forget to plug the datalines in the correct suit sockets — they're numbered, see? The torso restraint locks on both shoulders by twisting the round handle."



Head Unit

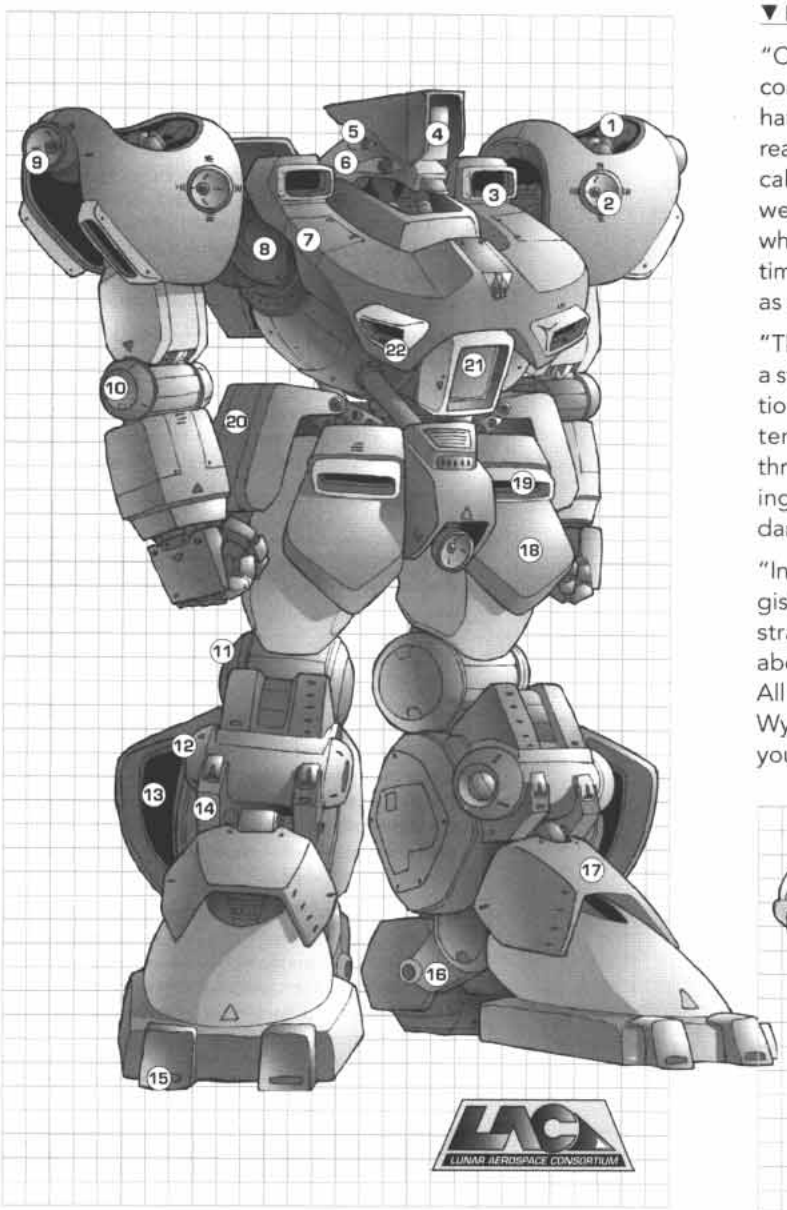
Cockpit Hatch

Backpack



▼ REAR VIEW

1 ..... Shoulder Hardpoint	12 ..... Rear Waist Thruster
2 ..... Main Sensor Housing	13 ..... Leg Thruster Array Housing
3 ..... Sensor Electronics Heatsink	14 ..... Rear Leg Thruster Array
4 ..... Head Protective Fairing	15 ..... Heel Mechanism Housing
5 ..... Upper Fusion Core Access Panel	16 ..... Ankle Articulation Housing
6 ..... Starboard Plasma Drive Housing	17 ..... Leg Thruster Array Access Panel
7 ..... Ceramic Variable Thruster Cone	18 ..... Mobile Armor Panel
8 ..... Elbow Articulation Housing	19 ..... Armor Panel Access Seam
9 ..... Main Waist Rotation Ring	20 ..... Arm Actuator Connecting Link
10 ..... Forearm Armor Panel	21 ..... Laminated Armor Panel
11 ..... Rear Waist Armor	22 ..... Lateral Shoulder Thruster



▼ FORWARD VIEW

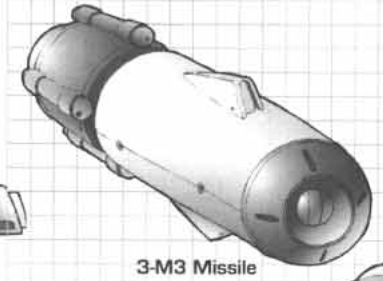
1	Shoulder Hardpoint	12	3MC-2 Missile Canister
2	Forward Shoulder Thruster	13	Forward Leg Thruster Array
3	Forward Torso Upper Thruster	14	Payload Clamp
4	Main Sensor Defense Panel	15	Balance Block
5	Zapper Mk II Laser AMS	16	Main Ankle Shock Absorber
6	LACW-1M Multitube Massdriver	17	Laminated Armor Greave
7	Upper Torso Access Panel	18	Forward Waist Armor
8	Main Shoulder Actuator Group	19	Waist Maneuver Thruster
9	Lateral Shoulder Thruster	20	Modular Waist Housing
10	Elbow Articulation Housing	21	Cockpit Hatch
11	Knee Articulation Housing	22	Lateral Torso Thruster

▼ PILOT'S COMMENTS

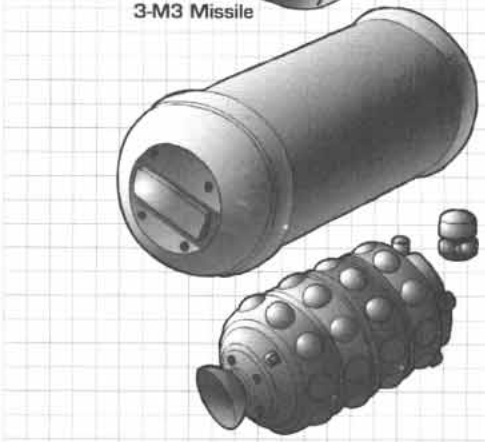
"Once strapped in, you'll notice that the flight controls are slightly out of the way, leaving your hands free to move. There's a red button within reach: press it, and both joysticks will automatically move into position, giving you flight and weapon control. Don't worry about losing whatever you had in the manipulators at the time, they are programmed to lock in position as soon as the main controls are activated.

"The joysticks operate much like the ones on a standard MMU, though they have more functions to handle the weapon and sensor systems. Be careful when taking off — those thrusters deliver quite a lot of power, and using them at anything more than a trickle will damage the docking area.

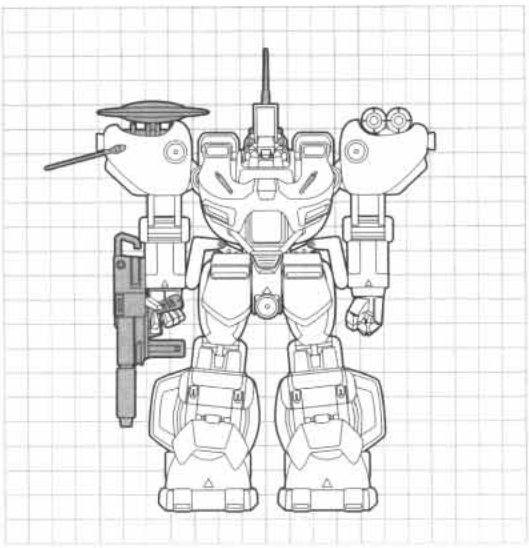
"In flight, the Wyvern responds somewhat sluggishly to commands. Go to a zeegee area and strap some weights to your limbs — that's about the right feel (it's good practice, too). All that mass has a good side, however. The Wyvern is one tough mother, and she'll take you home every time if you treat her right."



3-M3 Missile



3MC-2 Missile Canister

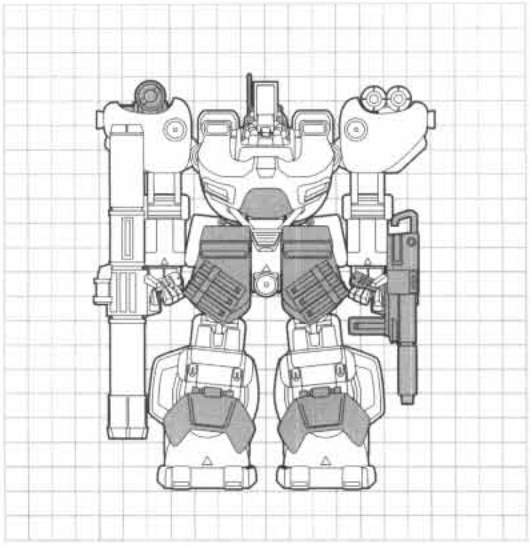


CEA-05CT WYVERN COMMAND

Add:	LACW-3 Massdriver rifle
Remove:	LACW-8 Hypergolic bazooka
Change:	Upgrade Sensors to +1, Comm to 0/20, Space Movement to 2.5 g

The Wyvern Command was developed by the Lunar Aerospace Consortium in 2207 as a field commander exo-armor. The Wyvern Command is usually piloted by officers of lieutenant rank or better, although some are also issued to aces. Except for the communication gear and modified armament, there are few modifications to the standard Wyvern frame.

The comm pack is composed of multiple antennae (the primary is mounted on the head) for long range communications. A small N&E 3LD EWAC system similar to the one mounted on the Jovian Pathfinder is mounted on the shoulder rack where the massdriver is normally fixed. The bazooka is replaced by a 12 mm hand-held LACW-3 automatic cannon.

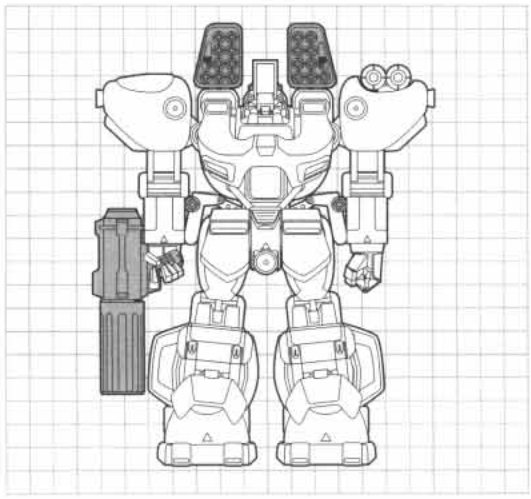


CEA-05MS WYVERN MARINE

Add:	200 BP, Reinforced Crew Comp., LACW-3 Massdriver rifle, Hummer knife
Remove:	-
Change:	Upgrade Armor to 34

The Wyvern Marine's nickname is "Leatherneck." Many of its armor plates are enlarged or thickened, and the main thrusters are modified to carry the extra weight along with additional propellant tanks. The cockpit hatch has also been fitted with a hinged plate that closes over it, providing more protection to the pilot inside.

Although the LACW-8 bazooka and all missile systems are still present, one LACW-3 12 mm hand-held massdriver rifle can also be carried. Extra clip fittings are bolted onto the skirt plates for additional bazooka and massdriver ammo. Since the standard Wyvern lacks hand-to-hand weaponry, the Marine carries a hummer knife in a forearm mount.



CEA-05R WYVERN BOMBER

Add:	2 x 3-N7 Missile canisters, RJ-56 Rocket Pod
Remove:	LAWC-8 Hypergolic bazooka
Change:	—

The Wyvern Bomber is one of the most common variants. It's a missile boat designed for close support, bombardment and area denial. The Bomber never operates far from a ship or supply base because its armament is entirely composed of missile weapons. It is also slightly slower than other Wyvern variants because of the mass of some of the missiles.

The hypergolic bazooka is replaced by twin large missile canisters for massive bombardment capabilities. The left shoulder hardpoint carry twin 3-M3 missiles for defense against enemy spacecraft. A hand-held pod of RJ-56 unguided rockets is available for use against slow targets and installations.

SILCORE STAT BLOCK

Name:	CEA-05 WYVERN
Size:	13 (Tall, 16.9 m)
*Defensive Threat Value (DTV)	
Movement:	Walk 3/6
Space 12/24	
Maneuver:	-1
Armor:	32/64/96
*Miscellaneous Threat Value (MTV)	
Crew:	Living 1; Computer 1 (Dumb, Level 2)

Deployment Range:	500 Km
Reaction Mass:	450 BP
Perks and Flaws: Accessory: Autopilot, Life Support, Escape System; Arms: 2x Manipulator Arm 13; Hostile Environment Protection: Radiation 4, Vacuum; Reinforced Systems: Back-ups, Crew; Negative Feature: Large Sensor Profile 2	

*Offensive Threat Value (OTV)

Quantity	Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
1	Zapper Mk2 AMS	F	+1	x3	1	6	Anti-Missile, HEAT, Defensive	Unl.
2	LACW-1 Massdriver	F	0	x5	1	4	Anti-Infantry	240
1	LACW-8 Bazooka	F	0	x15	5	0	Seeking 1	6
1	3-M3 Heavy Missile	F	-2	x30	5	0	Seeking 1, Smart 2	2
2	3-MC2 Rocket Canister	F	-1	x6	1	5	Indirect Fire	20
Option	LACW-3 Massdriver Rifle	F	0	x20	8	2	Armor Piercing	20
Option	3-N7 Missile Cannister	F	-2	x30	5	3	Indirect Fire, Heavy	9
Option	RJ-56 Rocket Cannister	F	-1	x20	2	5	Indirect Fire	20

OGL STAT BLOCK

Type:	Giant Robot
Size:	Gargantuan (Tall, 16.9 m)
Hit Points:	72 (MP: 64)
Occupancy:	1 operator, no cargo (MP: 10)
Armor Hardness:	26 (MP: 130)
Defense:	6
Strength:	55 (+22) (MP: 135)
Speed:	Land 54 kph, Realistic Space Flight (Thrust 1.2g, G-Round 275) (MP: 104+858)
Tactical Speed:	Land 90 m
Initiative:	-3 (MP: 5)
Maneuver:	-2 (MP: 10)
Total MP Cost:	2387
Total Money Cost:	477,400 credits

Special Abilities:
Booster (Space, 2.4g, G-Round 75, MP: 468), Tactical Radio (Secure, MP: 4), Laser Com (Secure, Interplanetary, MP: 14), Laser and Radar Warning Receivers (MP: 4), Ejection Seat (MP: 3), Life Support (MP: 16), Searchlights (MP: 2), Jumping (x5, MP: 20), GPS (MP: 2), Radar (2 km, MP: 30), Magnetic Sensor (2 km, MP: 6), Optics (2km, MP: 4), Infrared (2km, MP: 6), Stabilization Gear (MP: 10)
Exotic Abilities:
Limited A.I. (Dex3, Wis3, Cha1, MP: 35)
Mecha Defects:
Noisy (MP: -5), Reduced Endurance (1 day, MP: -15), Start Up Time (1 minute, MP: -2)

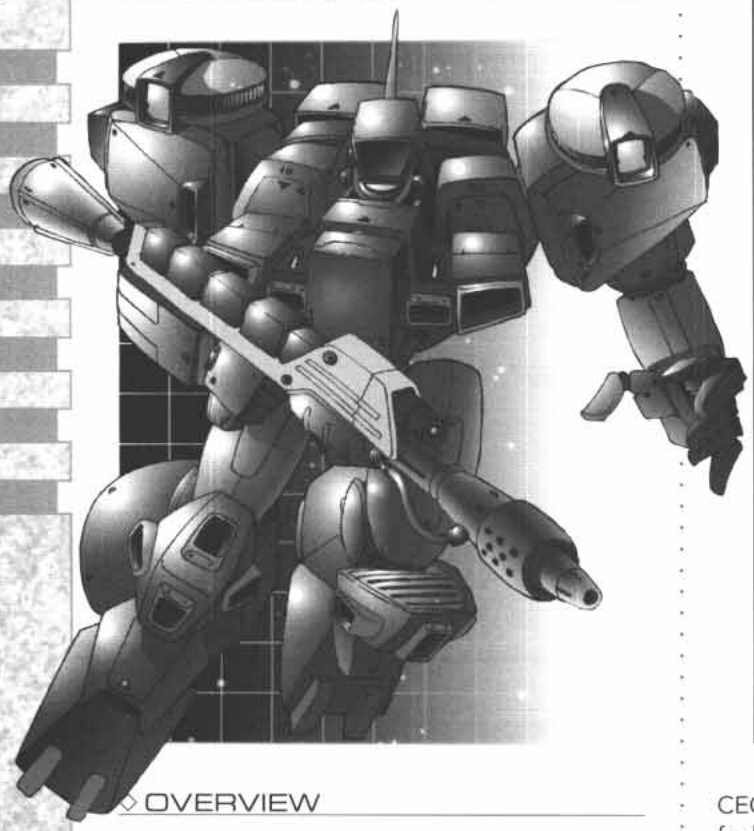
WEAPONS:

Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions	MP Cost
LACW-8 Bazooka*	10d12	A	800m	6	2x Long Range, Handheld	Arc of Fire (Fr) , 2x Less Ammo	(130)
3-M3 Missiles*	12d12	SS	960m	2	Armor Penetrating, Blast, Guided (IRH, ARH, LG), Indirect, 2x Long Range	Arc of Fire (Fr), 3x Less Ammo	429
Rocket Canisters*	3d6	SS	27m	40	Blast, Extra Ammo, Indirect, Volley	Arc of Fire (Fr)	(70)
LACW-1 Massdriver**	3d12	A	30m	200	2x Automatic, 3x Extra Ammo	Arc of Fire (Fr), Short Range	(97)
Anti-Missile Syst.***	4d6	A	72m	n/a	Cone, Long Range, Unlimited Shots	Arc of Fire (Fr), Low Penetration	(112)

NOTE: *Blast Weapons, **Ballistic Weapon; ***Energy Weapon. Both the rockets and missiles are Hardpoint-mounted.

7

▶ CERBERUS



DATA

Name:	Cerberus
Production Code:	CEA-09
Origin:	Central Earth Government & Administration
Manufacturer:	Lunar Aerospace Consortium
Type:	Hunter/Killer Exo-Armor
Role:	Anti-Ship Strike, Assault, Counter-Insurgency, Fighter
Control System:	Linear Frame
Height:	17.1 m
Width:	14.8 m
Empty Weight:	52.4 Tons
Loaded Weight:	63.4 Tons
Main Drive:	2 x 12 MW
Powerplant:	1712 KW
Main Thrusters:	5 x 10,000 kg, 2 x 9000 kg
Apogee Motors:	30
Walking Speed:	36 kph
Acceleration:	1.8 g
Onboard Sensors:	Audio, ECCM, ECM, Fire Control Radar, Infra-red/Ultraviolet, Lidar, Low-light, Magnetometer, Microwaves, Motion Detectors,Radcounter, Telescope
Fixed Armament:	LACW-1M Massdrivers x 2, MW-1 Plasma Lance, Hummer Knife
Additional Armament:	LACW-11 30 mm Massdriver Rifle
Defensive Systems:	Mag Screen
Equipment:	Escape Pod

◇ OVERVIEW

The Cerberus is the latest addition to the CEGA arsenal. It is the result of the collaboration of engineers from CEGA, LAC and a Venusian firm (the name of which remains unrevealed at this time). Conceived as a hunter/killer exo, the Cerberus — unlike the Wyvern — is an entirely new design.

Although the head bears a strong resemblance with that of the Martian Explorer, it actually contains more scanners and cameras, and twin LACW-1M massdrivers for close range combat. The name Cerberus comes from its two massive shoulder pods in which a vast array of ECM and EWAC systems are stored, as are several sensors, scanners and stereoscopic cameras. When these systems are active, the machine seems to have three heads, hence its name.

◇ CAPABILITIES

The backpack has large thrusters and an adaptor for an extra reaction mass tank to increase its reserve. Since the Cerberus relies on speed, maneuverability and its hit-and-run tactics, its weaponry is limited in scope; it is composed of two head-mounted massdrivers and one large hand-carried massdriver rifle. For the first time on a CEGA machine, a plasma lance is incorporated for hand-to-hand combat, and is stored in the right hip compartment. The left hip compartment contains a HummerKnife identical to the Wyvern Marine's. The real bite of the Cerberus is its main weapon, a LACM-11 30 mm massdriver rifle that fires depleted uranium-tungsten rounds. It is linked with the targeting computer via an interface cable connected on the side of the chest. The Newton & Ewell targeting and tracking system is primarily responsible for the incredible accuracy of the weapon, which is said to be able to hit a running light on a ship from kilometers away. Since the cannon is unusually long, a thermal jacket prevents any overheating which could warp the barrel and reduce the weapon's accuracy. The thermal jacket also helps maintain the magnets' operating temperature.

The Cerberus is usually painted matte dark red, but the color scheme can be changed if necessary (white with a dark grey "broken line" camo is especially popular). There are currently no variations, but suggested alternative payload for this machine would be a LACW-3 12 mm hand-held massdriver similar to the one used by the Wyvern Marine and Command.

SILCORE STAT BLOCK

Name:	CEA-09 CERBERUS
Size:	14 (Tall, 17.1m)
*Defensive Threat Value (DTV)	
Movement:	Walk 3/6
Space 13/25	
Maneuver:	-1
Armor:	35/70/105
*Miscellaneous Threat Value (MTV)	
Crew:	Living 1; Computer 1 (Dumb, Level 2)

Deployment Range:	300 Km
Reaction Mass:	350 BP
Perks and Flaws: Accessory: Autopilot, Life Support, Escape System; Arms: 2x Manipulator Arm 14; Hostile Environment Protection: Radiation 4, Vacuum; Information Warfare Devices: Electronic Counter Measures 4, Electronic Counter Counter Measures 4; Reinforced Systems: Backups, Crew; Negative Feature: Large Sensor Profile 2	

*Offensive Threat Value (OTV)

Quantity	Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
1	LACW-3 Massdriver Rifle	F	0	x20	8	2	Armor Piercing, Sniper	20
2 200	LACW-1 M Head Massdriver	F	0	x8	1	4		Anti-Missile
1	MW-1 Plasma Lance	F	0	x20	Melee	0	Armor Crushing, Concealed, HEAT	LU3
1	Hummer Knife	F	0	x7	Melee	0	Armor Piercing, Concealed	

OGL STAT BLOCK

Type:	Giant Robot
Size:	Gargantuan (Tall, 16.9 m)
Hit Points:	72 (MP: 64)
Occupancy:	1 operator, no cargo (MP: 10)
Armor Hardness:	26 (MP: 130)
Defense:	6
Strength:	55 (+22) (MP: 135)
Speed:	Land 54 kph, Realistic Space Flight (Thrust 1.2g, G-Round 275) (MP: 104+858)
Tactical Speed:	Land 90 m
Initiative:	-3 (MP: 5)
Maneuver:	-2 (MP: 10)
Total MP Cost:	2387
Total Money Cost:	477,400 credits

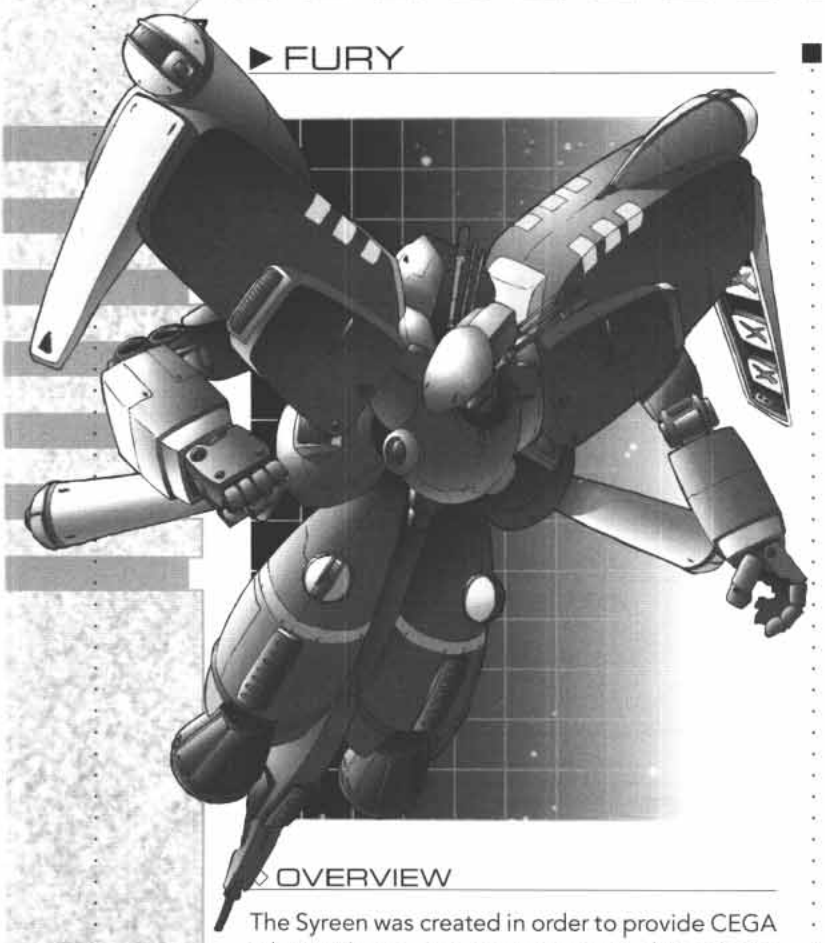
Special Abilities:
Booster (Space, 2.4g, G-Round 75, MP: 468), Tactical Radio (Secure, MP: 4), Laser Com (Secure, Interplanetary, MP: 14), Laser and Radar Warning Receivers (MP: 4), Ejection Seat (MP: 3), Life Support (MP: 16), Searchlights (MP: 2), Jumping (x5, MP: 20), GPS (MP: 2), Radar (2 km, MP: 30), Magnetic Sensor (2 km, MP: 6), Optics (2km, MP: 4), Infrared (2km, MP: 6), Stabilization Gear (MP: 10)
Exotic Abilities:
Limited A.I. (Dex3, Wis3, Cha1, MP: 35)
Mecha Defects:
Noisy (MP: -5), Reduced Endurance (1 day, MP: -15), Start Up Time (1 minute, MP: -2)

WEAPONS:

Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions	MP Cost
LACW-3 Massdriver* 433	10d12	A	1600m	20	Automatic, 3x Long Range, Handheld		Arc of Fire (Fr)
LACW-1M Massdriver*	4d12	A	80m	n/a	2x Automatic	Arc of Fire (Fr), Short Range	(52)
Plasma Lances*	10d12	SS	n/a	5	Armor Penetrating, Concealed, Handheld, Increased Critical (x3)	Arc of Fire (Fr), 2x Less Ammo, Melee (Large)	(104)

NOTE: *Ballistic Weapon; **Energy Weapons

▶ FURY



DATA

Name:	Fury
Production Code:	CEA-12
Nation of Origin:	CEGA
Manufacturer:	Lunar Aerospace Consortium
Type:	General Purpose Space Exo-Armor
Role:	Anti-Ship, Strike, Interceptor, Tactical Strike
Control System:	Linear Frame
Height:	17.0 m
Width:	16.8 m
Empty Weight:	49.4 tons
Loaded Weight:	59 tons
Main Powerplant:	32 MW
Secondary Powerplant:	1203 KW
Tertiary Powerplant:	3400 KW
Main Thrusters:	2 x 50,000 kg, 6 x 10,000 kg
Apogee Motors:	24
Ground Speed:	18 kph
Acceleration:	3.0 g
Onboard Sensors:	Same as Syreen
Fixed Armament:	1 x LACW-32oc ACDLS "Hecatonchires"
Additional Armament: Railgun	6 x Venturus SVM-2 missiles, LACW-14
Defensive Systems:	Mag Screen
Equipment:	Escape Pod

◇ OVERVIEW

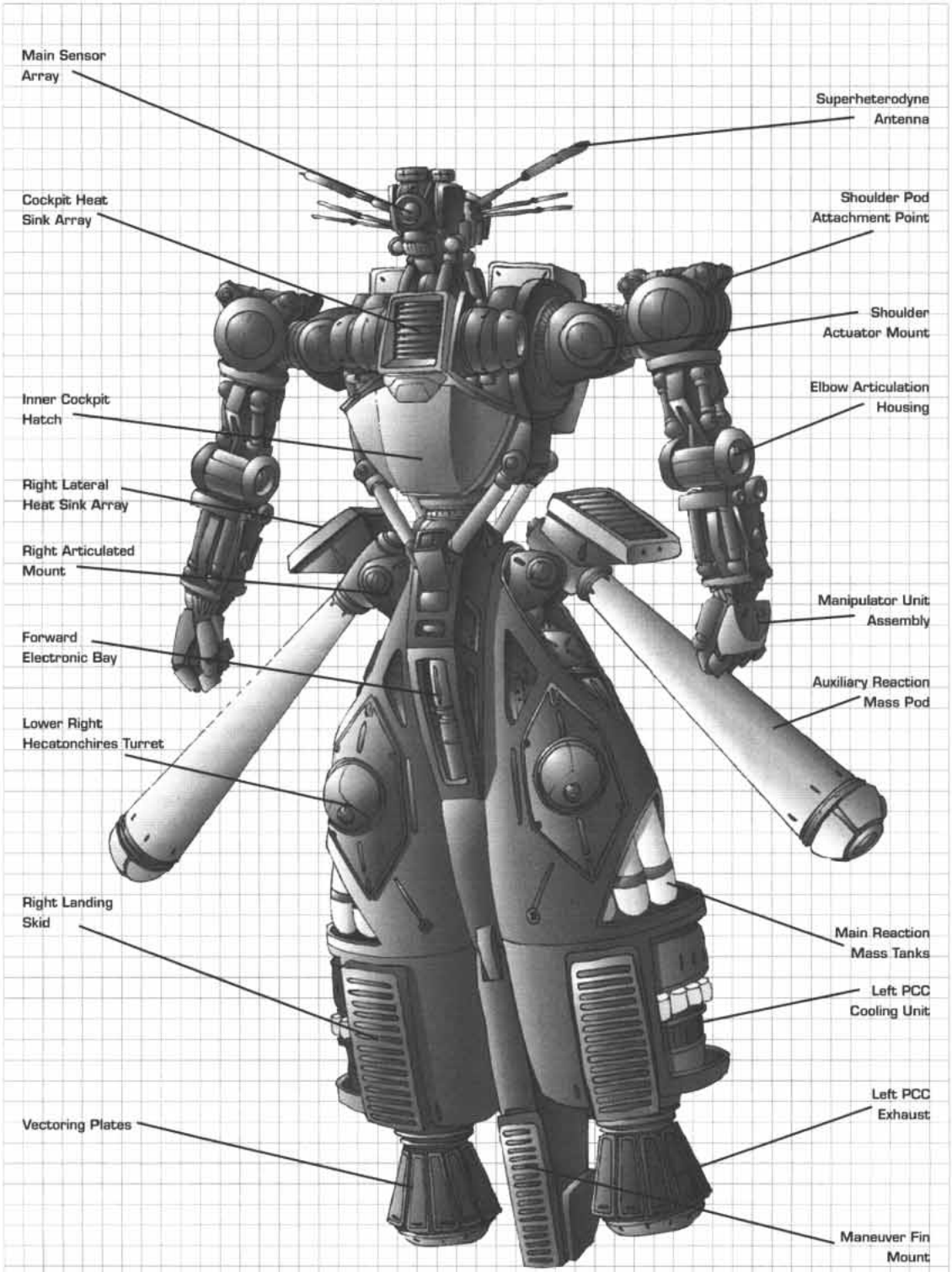
The Syreen was created in order to provide CEGA pilots with exo-armor experience and to act as a stopgap machine to defend CEGA's borders while a more advanced vehicle could be worked on. Several projects were started and ran in parallel for the first decade of the twenty-third century. The Wyvern was finished first and resources from the remaining projects were delayed to speed its mass production.

It was not until eight months after the Battle of Elysée that the first production models of the Syreen Upgrade Package, dubbed Fury, came out of LAC's Clavius facility. Applying as much as they could from the data gleaned from the Dragonstriker's combat performance and from the ongoing Typhon project trials, the LAC design team had come up with an extensive modification regime for the Syreen that created an exo-armor capable of going toe-to-toe with known Jovian designs without necessitating the tooling up of a whole new production line. Sharing a fifty-five-percent parts commonality with the Syreen and possessing remarkably similar handling, the Fury became popular immediately.

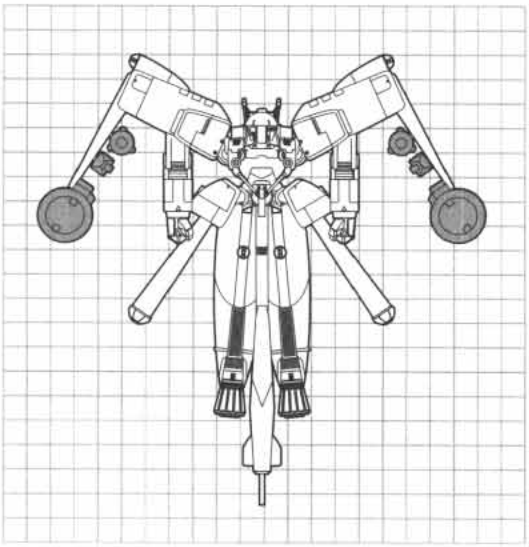
◇ CAPABILITIES

The Hecatonchires system, first tested on the Typhon prototypes, is found on the Fury in its mass-produced form. The installation of this refined ACDLS is the most complex part of the Syreen-to-Fury construction since it involves the linking of multiple turrets located at the vehicle's extremities to a secondary power generator mounted just underneath the main powerplant in the torso, as well as a central fire control computer. Complaints have arisen from technicians regarding the difficulty of tracking down faults in the system when they occur. Eight hardpoints — two on the back and the rest under the shoulder pods — support the remainder of the armament.

Although the Fury's weak frame is identical to that of the Syreen, the designers have worked around that deficiency, finding an alternate route of defense. The Fury is covered with special mass-produced tiles that serve as partial protection against sensor detection. It also possesses improved internal cooling systems to reduce unnecessary venting of telltale gases. An EW pod is also standard equipment, making the Fury an exceptionally difficult target to acquire and hit.



LUNAR AEROSPACE CONSORTIUM

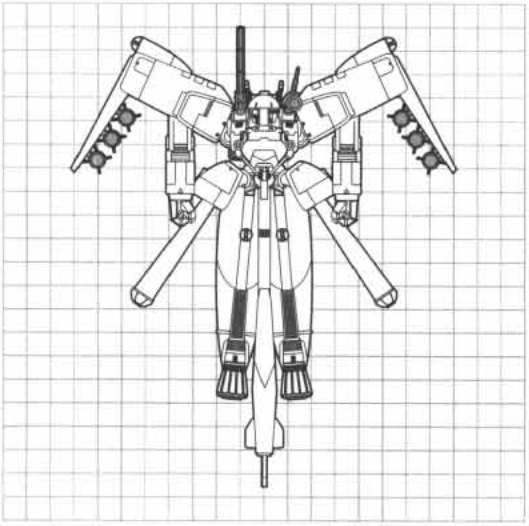


ALECTO, THE UNCEASING

Add:Satellite Uplink, 2 x Sparrow Recon Drone, ECCM R3, Exposed Aux. Systems, 350 BP
Remove: -
Change:Upgrade Sensors to +2/12 km, Communications to +1/20 km, downgrade FireCon to -1

The Alecto is the reconnaissance configuration of the Fury. It carries a variety of pods performing electronic warfare, communication, detection and recording functions. Each shoulder bears a Sparrow reconnaissance drone, a comm/ECCM pod, and a rotating sensor pod. The rear hardpoints are occupied by two large propellant/coolant tanks for extended range.

A small amount of funding has been allocated for the design of a Fury-compatible booster for Alecto. This project has low priority, however.

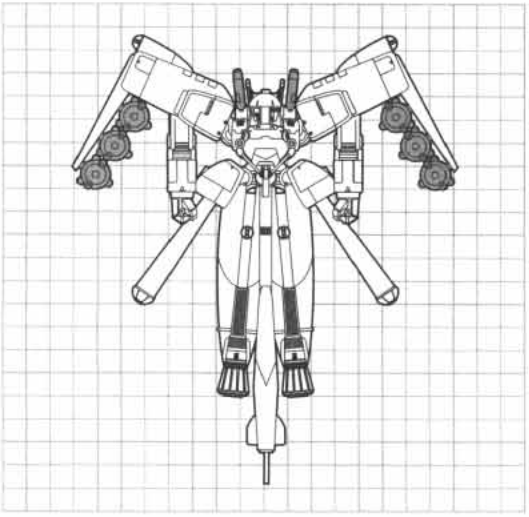


MEGAERA, THE GRUDGING

Add:	6 x A9 missiles, 1 x railgun
Remove:	-
Change:	-

The default configuration of the Fury is designed to be well rounded, within the limits set forth by the vehicle's basic design principle. Many mission profiles currently flown by Furies, such as patrol and escort, are not affected by the presence of the railgun. As a result, many commanders opt to send out their Megs without this piece of fragile and expensive equipment, thus cutting down on maintenance and overhaul time.

Talk of a command unit based on the Megaera configuration, equipped with an upgraded communications system and a second cockpit, is making its way around the CAF high command.



TISIPHONE, THE AVENGING

Add: 6 x SR-15 Shrike Anti-Ship Torpedoes, 2 x Plasma Cutter, 60 m^2 open cargo area for torpedo mounts	
Remove:	-
Change:	Space movement to 2.0g

The Tisiphone configuration is conceived as a ship-killer to the exclusion of all else. The weapon hardpoints are laden with heavy smart torpedoes. The torpedoes' mass make the Tis less nimble than normal, so lightning strikes at top speed are de rigeur for this vehicle.

The Tis is even deadlier to ships at close range; its rear hardpoints mount two large plasma cutters which, while only carrying enough fuel for a single use each, can slice a large target open from stem to stern in a single pass. The plasma cutters fire "upward," thus requiring the pilot only to fly close to the target, point the exo toward it, and pull the trigger.

SILCORE STAT BLOCK

Name:	CEA-12 FURY
Size:	13 (Tall, 17.0 m)
*Defensive Threat Value (DTV)	
Movement:	Space 15/30
Maneuver:	0
Armor:	24/48/72
*Miscellaneous Threat Value (MTV)	
Crew:	Living 1; Computer 1 (Dumb, Level 2)
Deployment Range:	500 hrs

Reaction Mass:	350 BP
Perks and Flaws: Accessory: Autopilot, Life Support, Escape System; Arms: 2x Manipulator Arm 10; Hostile Environment Protection: Radiation 3, Vacuum; Information Warfare Device: Decoy System; Reinforced Systems: Backups, Crew; Annoyance (Cranky Hecatonchires: -1 to repair); Weakness: Fragile Chassis; Negative Feature: Large Sensor Profile 1	

*Offensive Threat Value (OTV)

Quantity	Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
1a	Hecatonchires	T	+1	x15	3	2	HEAT, Attenuating Damage 1	Unl.
1b	Hecatonchires AM Mode	T	+1	x2	1	6	Anti-Missile, HEAT, Defensive	Unl.
Option	A9 Medium Missiles	F	0	x15	5	0	Seeking 1	Option
Option	Railgun	FF	0	x17	6	0	Sniper, Minimum Range 6	10
Option	Plasma Cutter	FF	-2	x40	Melee	0	HEAT	1
Option	Shrike torpedoes	CHAOS p.112						
Option	Sparrow Recon Drones	CHAOS p.113						

OGL STAT BLOCK

Type:Type:	Giant Robot
Size:	Gargantuan (Tall, 17 m)
Hit Points:	40 (MP: 0)
Occupancy:	1 operator, no cargo (MP: 10)
Armor Hardness:	24 (MP: 120)
Defense:	6
Strength:	50 (+20) (MP: 120)
Speed:	Realistic Space Flight (Thrust 1.5g, G-Round 250) (MP: 900)
Tactical Speed:	n/a
Initiative:	-2 (MP: 10)
Maneuver:	-2 (MP: 10)
Total MP Cost:	2117

Total Money Cost:	423,400 credits
Special Abilities:	
Booster (Space, 3g, G-Round 50, MP: 360), Tactical Radio (Secure, MP: 4), Laser Com (Secure, Interplanetary, MP: 14), Laser and Radar Warning Receivers (MP: 4), Defensive Jammer (+4, MP: 12), Ejection Seat (MP: 3), Life Support (MP: 16), GPS (MP: 2), Radar (2 km, MP: 30), Magnetic Sensor (2 km, MP: 6), Optics (2km, MP: 4), Infrared (2km, MP: 6), Stabilization Gear (MP: 10), Targeting Device (Hecantonchires, +1, MP: 5)	
Exotic Abilities:	
Limited A.I. (Dex3, Wis3, Cha1, MP: 35)	
Mecha Defects:	
Noisy (MP: -5), Reduced Endurance (1 day, MP: -15), Start Up Time (1 minute, MP: -2)	

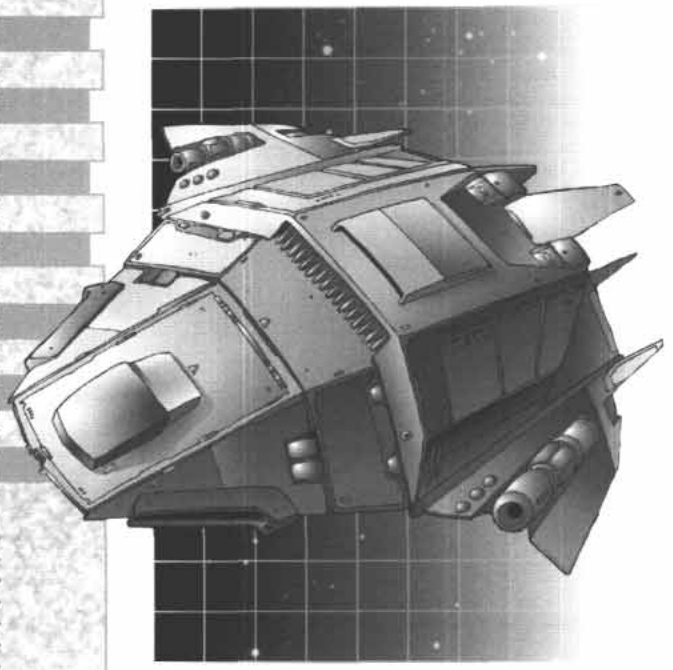
WEAPONS

Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions	MP Cost
Hecantonchires-1*	5d12	S	200m	n/a	Long Range, Semiauto, Unlimited Shots	—	390
Hecantonchires-2*	4d6	S	36m	n/a	Semiauto, Unlimited Shots	—	(140)
Railgun*	10d12	S	1600m	10	3x Long Range	Arc of Fire (Fr), Less Ammo	(260)
A9 Missiles**	10d12	SS	400m	6	Armor Penetrating, Blast, Guided (IRH,ARH, LG), Indirect, Long Range	Arc of Fire (Fr), 3x Less Ammo	(325)

NOTE: *Energy Weapon; **Blast Weapons. Both the railgun and missiles are Hardpoint-mounted.

7

▶ WRAITH



DATA

Name:	Wraith
Production code:	EAH-01
Origin:	CEGA
Manufacturer:	Dassault-MBB Consortium
Type:	heavy interceptor
Role:	Anti-Ship Strike, Fighter, Tactical Strike
Control system:	Standard Cockpit
Length:	19.4 m
Width:	15 m
Empty Weight:	65.7 Tons
Loaded Weight:	75 Tons
Powerplant:	1970 KW
Main thrusters:	3 x 70,000 kg
Apogee motors:	10
Flight Speed:	1200 kph
Acceleration:	2.4 g
Avionics	ECCM, Fire Control Radar, Infrared/Ultraviolet, Ladar, Magnetic Anomaly Detector, Microwaves, Motion Detectors, Radcounter, Telescope, Thermograph
Fixed Armament:	n/a
Additional Armament:	Massdriver, Heavy Missiles, Light Missiles
Defensive Systems:	Mag Screen
Equipment:	Escape Pod

◇ OVERVIEW

The Wraith is one of the better known interceptor designs in the solar system. Though it is starting to show its age, it is still a reliable and versatile workhorse, capable of handling a large variety of missions both in atmosphere and low orbit. The design pays for this increased versatility with only average flight performances, but is well armored and capable of transporting a decent weapon payload. The crew is composed of two persons, one pilot and one system officers. They sit in tandem under an armored cover located at the front of the ship, receiving flight information through holographic panels (an upgraded version of the same technology is used in exo-armors and modern ship bridges).

The interceptor is easily recognized by its stubby delta-winged shape. Most of its lift is derived from the shape of the body, with the small wings serving as weapon bearing locations and control surfaces. The engine cones are surrounded by thrust vectoring plates for additional maneuverability, though the mass of the ship and the lack of proper moment arms cancel any real advantage this might give over other fighters.

◇ CAPABILITIES

The Wraith has been designed as a multi-role vehicle, capable of handling threats both nearby and on the other side of the globe. Though it lacks a transatmospheric capability of its own, it can be mated to a fully reusable fly-back booster unit to put it into low orbit, allowing it to be anywhere on Earth within an hour of launch. It can also fly extremely long distances, though it is not equipped for in-flight refueling.

The vehicle carries its armament on two wing hardpoints and in a central weapon bay. The wing hardpoints are located on top of the wings and are slightly recessed to protect the weapon systems during re-entry. Both hardpoints and bay can accommodate a large variety of weapon systems.

The Wraith has few variants of note, since most airframes were either retired or refurbished as new technological developments were made available. Most ground crew are willing to spend some time adapting standard CEGA military ordinance to fit the hardpoints, so field variants are common. This is especially true of the older second line units assigned to remote areas in South America and North Africa.

SILCORE STAT BLOCK

Name:	CF-03 WRAITH
Size:	12 (Long, 14.1m)
*Defensive Threat Value (DTV)	
Movement:	Space 13/25
	Flight 20/40
Maneuver:	-2
Armor:	30/60/90
*Miscellaneous Threat Value (MTV)	
Crew:	Living 2; Computer 1 (Dumb, Level 2)

Deployment Range:	2000 Hrs
Reaction Mass:	250 BP
Perks and Flaws: Accessory: Autopilot, Life Support, Escape System; Feature: Re-entry System, Stratospheric Flight; Hostile Environment Protection: Radiation 3, Vacuum; Reinforced Systems: Backups, Crew	

*Offensive Threat Value (OTV)

Quantity	Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
2	Xander X10 Particle Acc.	FF	0	x10	4	0	HEAT, Haywire, Attenuating Damage 1	Unl.
1	MH-3 Heavy Missile	FF	-2	x30	5	0	Seeking 1, Smart 2	3
Option	F78 Cannon	FF	0	x10	3	5	-	200
Option	MV-2 Homing Missile	FF	-2	x25	5	0	Energy-Homing, Seeking 1	Option
Option	K3 Unguided Rocket Pod	FF	-1	x6	2	5	Indirect Fire	32

OGL STAT BLOCK

Type:	Vehicle
Size:	Gargantuan (Long, 14.1 m)
Hit Points:	55
Occupancy:	2 operators, no cargo
Armor Hardness:	30
Defense:	n/a
Strenth:	n/a
Speed:	Realistic Space Flight (1.3 g, G-round 80)
Tactical Speed:	n/a
Initiative:	-4
Maneuver:	-4

Special Abilities:	Booster (2.6 g, G-Round 40), Comm (LR Radio, Laser Comm, Microwave; Secure), Ejection Seats, Laser and Radar Warning Receivers, Life Support, Nav System (GPS), Re-entry Shield; Sensors (Optics, Low-Light, Hi-res Radar, Magnetic; all 2 km), Stabilization Gear
Exotic Abilities:	Limited A.I. (Dex 3, Wis 3, Cha 1)
Mecha Defects:	Reduced Endurance (few days), Start Up Time (1 minute)

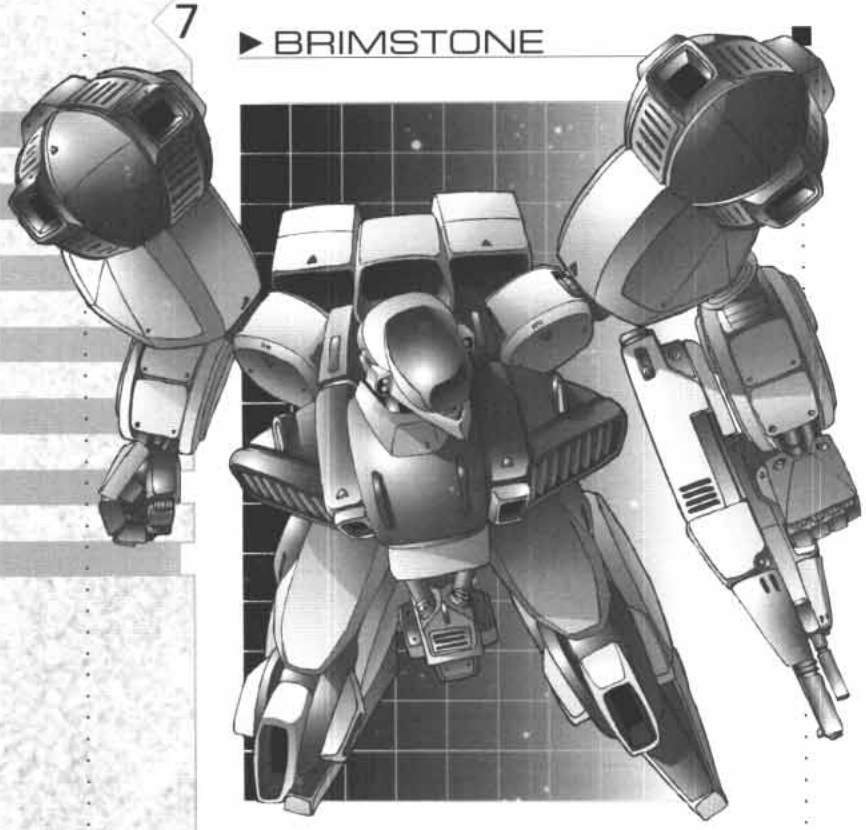
Weapons:

Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions
Particle Cannons*	4d12	A	160m	Unl.	Increased Threat (19-20)	Arc of Fire (Front)
Hvy. Missiles**	12d12	A	240m	3	AP, Blast, Guided (IRH, ARH, LG), Indirect	Arc of Fire (Front)

*Plasma/Electricity; **Blast

7

▶ BRIMSTONE



DATA

Name:	Brimstone
Production Code:	HA-101
Origin:	Mercury
Manufacturer:	Hermes Aerospace
Type:	Medium exo-armor
Role:	Close Support, Fighter, Search & Rescue, Tactical Strike
Control System:	Linear Frame
Height:	15.4 m
Width:	16 m
Empty Weight:	35 Tons
Loaded Weight:	38 Tons
Main Drive:	19 MW
Powerplant:	2000 KW
Main Thrusters:	4 x 14,000 kg, 2 x 12,000 kg, 2 x 10,000 kg
Apogee Motors:	12
Walking Speed:	24 kph
Acceleration:	2.8 g
Onboard Sensors:	Fire Control Radar, Infrared/Ultraviolet, Lidar, Low-light, Magnetometer, Microwaves, Motion Detectors,Radcounter, Telescope
Fixed Armament:	L6 Plasma Lances
Additional Armament:	FEStar-12 Massdriver Rifle, M10 Light Missiles, M30 Heavy Missiles
Defensive Systems:	Mag Screen
Equipment:	Escape Pod, ECM/ECCM (opt.)

◇ OVERVIEW

The Hermes Aerospace Brimstone is the newest exo-armor to enter service in the ranks of the Mercurian defense force. The machine is the first home-grown exo-armor produced entirely in Mercurian space. It was designed to answer the needs of both the army and the Merchant Guild, which has ordered the Brimstone to escort its transports.

The first Brimstone prototype took its first step in March of 2203, after a long development period characterized by numerous difficulties. Most of these came from Hermes' limited experience in the field of exo-vehicle design, as the company's exo-craft devision had only produced one such vehicle in the past (the HA-600 exo-suit, back in 2190).

◇ CAPABILITES

The most prominent characteristic of the Brimstone is its large thrust rating. Its eight main engines, all based on PCC technology, generate enough thrust to propel the craft forward at almost three Earth gravities. Unfortunately, this is achieved at the expense of the reaction mass reserve. The Brimstone's has large maneuver thruster arrays located on the shoulder and in the feet, giving it increased maneuverability. The Hermes design team heard of JAW's experiment with removable engine pods, and applied a similar principle to the HA-101's shoulders.

Hermes incorporated a number of design elements that were specifically requested by the Mercurian government and the Merchant Guild. The Brimstone has large manipulator units that are useful when handling material and ships in space docks. It also features numerous heatsinks and cooler units since it often operates under high temperature conditions. The sensors are completely protected by a tough one-way radome. Auxiliary cameras are placed in twin pod mounts on either side of the head unit and on the torso.

Ever since its introduction in 2205, the Brimstone has been dismissed by military observers as a marginally effective exo-armor that tries to do too many things at once. It has a high thrust rating, but not enough reaction mass. It can support electronic warfare pods, but nothing really powerful. It has weapon hard points, but not enough of them. Still, it has proven popular with merchant associations, who appreciate the fact that it can serve as a makeshift tug and cargo-handler when not defending their ships against attacks.

SILCORE STAT BLOCK

Name:	HA-101 BRIMSTONE
Size:	12 (Tall, 15.4 m)
*Defensive Threat Value (DTV)	
Movement:	Walk 2/4
Space 14/28	
Maneuver:	Walk -1
	Space +1
Armor:	26/52/78
*Miscellaneous Threat Value (MTV)	

Crew:	Living 1; Computer 1 (Dumb, Level 2)
Deployment Range:	150 Km
Reaction Mass:	200 BP
Perks and Flaws: Accessory: Autopilot, Life Support, Escape System; Armor Quality: HEAT Resistant 2; Arms: 2x Manipulator Arm 12; Hostile Environment Protection: Extreme Heat, Radiation 3, Vacuum; Reinforced Systems: Backups, Crew; Movement Flaw: Decreased Maneuver 2; Negative Feature: Large Sensor Profile 3	

*Offensive Threat Value (OTV)

Quantity	Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
1	FESTar-12 Rifle	F	0	x10	4	2	-	180
1	M10 Light Missile	F	-2	x15	3	0	Seeking 1, Smart 2	6
1	M30 Heavy Missile	F	-2	x30	5	0	Seeking 1, Smart 2	2
2	L6 Plasma Lance	F	0	x12	Melee	0	Armor Crushing, Concealed, HEAT	LU3

OGL STAT BLOCK

Type:	Giant Robot
Size:	Gargantuan (Tall, 15.4 m)
Hit Points:	66 (MP: 52)
Occupancy:	1 operator, no cargo (MP: 10)
Armor Hardness:	26 (MP: 130)
Defense:	6
Strength:	55 (+22) (MP: 135)
Speed:	Land 36 kph, Realistic Space Flight (Thrust 1.4g, G-Round 150) (MP: 78+546)
Tactical Speed:	Land 60 m
Initiative:	-2 (MP: 10)
Maneuver:	-2 (MP: 10)
Total MP Cost:	1712

Total Money Cost:	342,400 credits
Special Abilities:	
Booster (Space, 2.8g, G-Round 25, MP: 182), Chobham Armor (MP: 26), Tactical Radio (Secure, MP: 4), Laser Com (Secure, Interplanetary, MP: 14), Laser and Radar Warning Receivers (MP: 4), Ejection Seat (MP: 3), Life Support (MP: 16), Searchlights (MP: 2), Jumping (x5, MP: 20), GPS (MP: 2), Radar (2 km, MP: 30), Magnetic Sensor (2 km, MP: 6), Optics (2km, MP: 4), Infrared (2km, MP: 6), Stabilization Gear (MP: 10)	
Exotic Abilities:	
Limited A.I. (Dex3, Wis3, Cha1, MP: 35)	
Mecha Defects:	
Noisy (MP: -5), Reduced Endurance (1 day, MP: -15), Start Up Time (1 minute, MP: -2)	

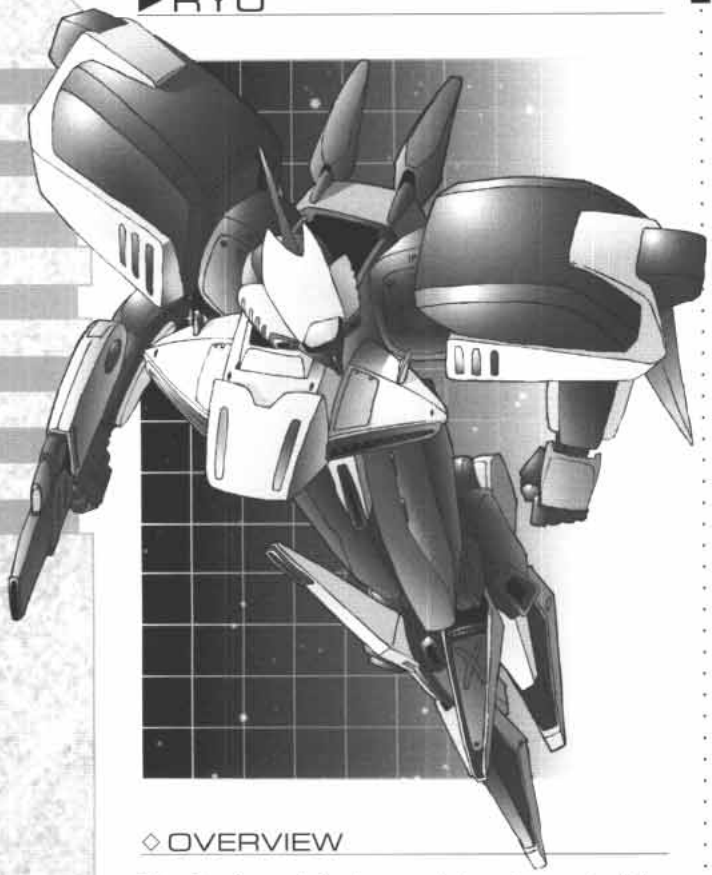
WEAPONS:

Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions	MP Cost
FESTar-12 Rifle*	6d12	A	240m	60	Automatic, 2x Extra Ammo, Long Range, Handheld	Arc of Fire (Fr)	(260)
M10 Missiles**	7d12	SS	280m	6	Armor Penetrating, Blast, Guided (IRH,ARH, LG), Indirect, Long Range	Arc of Fire (Fr), 2x Less Ammo	(303)
M30 Missiles**	10d12	SS	800m	2	Armor Penetrating, Blast, Guided (IRH,ARH, LG), Indirect, 2x Long Range	Arc of Fire (Fr), 3x Less Ammo	330
Plasma Lances*	10d12	SS	n/a	10	Armor Penetrating, Concealed, Handheld, Increased Critical (x3)	Arc of Fire (Fr), 2x Less Ammo, Melee (Large)	(130)

NOTE: *Ballistic Weapon; **Blast Weapon; ***Energy Weapons. The missiles are Hardpoint-mounted.

7

▶ RYU



DATA

Name:	Ryu
Production Code:	G-1
Origin:	Venus
Manufacturer:	Venusian Aero Corp
Type:	Medium exo-armor
Role:	Anti-Ship Strike, Fighter, Interceptor, Tactical Strike
Control System:	Linear Frame
Height:	16 m
Width:	12.5 m
Empty Weight:	31.5 Tons
Loaded Weight:	35 Tons
Main Powerplant:	2 x 6.8 MW
Secondary Powerplant:	1700 KW
Main Thrusters:	2 x 25,000 kg, 2 x 8,000 kg
Apogee Motors:	14
Walking Speed:	48 kph
Acceleration:	2 g
Onboard Sensors:	Fire Control Radar, Infrared/Ultraviolet, Lidar, Low-light, Magnetometer, Microwaves, Motion Detectors,Radcounter, Telescope
Fixed Armament:	2 x Najima P8 Head Pulse Lasers, 2 x Xidar-4 Plasma Lances
Additional Armament:	Krauss K-675R Massdriver Rifle, ALM-16 Medium Missiles, AHM-4 Heavy Missiles
Defensive Systems:	Mag Screen
Equipment:	Escape Pod

◇ OVERVIEW

The Ryu is a relatively recent development of the Venusian exo-armor industry. It is a state-of-the-art, high performance exo-armor which is intended to become the main Venusian trooper unit in the next decade.

The Ryu is a little-known vehicle, as it was not well publicized by the Home Defense Force and its maker, Venusian Aero Corp. Pictures are hard to get, the information that follows is based on what little has been released about them and pictures taken at long range.

◇ CAPABILITIES

The Ryu is built along traditional exo-armor design principes. It uses both hydraulic and myomar technologies to move its limbs and weapon systems, and is powered by a standard micro-fusion reactor located in the rear section of the body. The standard G-1 configuration has a large backpack, indicating good reaction mass reserve and good or superior acceleration.

The Venusian exo-armor does not seem to have been intended as a "slugger" combat unit. The legs are very thin, indicating a possible structural weakness. The only built-in ranged weapons are the twin massdrivers mounted in blisters on either side of the head unit. There are hard points on both shoulders, probably for missiles or rocket packs, but there are no other apparent weapon-bearing locations. Most likely, any other armament will be carried in the manipulators.

The vehicle is far from defenseless in melee combat, however, as it can carry two to four plasma lances in a special compartment located behind mobile armor panels on the upper thighs.

The Ryu is a relatively recent addition to the Venusian Home Defense Force and as such has not had time to make a name for itself. It is currently fielded alongside the Oni, the Venusian version of the Wyvern exo-armor. The Ryu is expected to completely replace that obsolete unit within the next ten years.

SILCORE STAT BLOCK

Name:	G-1 RYU
Size:	11 (Tall, 16 m)
*Defensive Threat Value (DTV)	
Movement:	Walk 6/11
Space 11/22	
Maneuver:	+1
Armor:	25/50/75
*Miscellaneous Threat Value (MTV)	
Crew:	Living 1; Computer 2 (Dumb, Level 3)

Deployment Range:	500 Km
Reaction Mass:	300 BP
Perks and Flaws: Accessory: Autopilot, Life Support, Escape System; Armor Quality: HEAT Resistant 2; Arms: 2x Manipulator Arm 11; Hostile Environment Protection: Radiation 3, Vacuum; Reinforced Systems: Backups, Crew; Negative Feature: Large Sensor Profile 1	

*Offensive Threat Value (OTV)

Quantity	Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
2	P8 Head Pulse Laser	F	0	x5	1	3	Anti-Infantry, Anti-Missile, HEAT	240
1	K-675R Massdriver Rifle	F	0	x12	3	2	-	200
1	ALM-16 Medium Missile	F	-1	x16	3	0	Seeking 1, Smart 2	4
2	Xidar-4 Plasma Lance	F	0	x16	Melee	0	Armor Crushing, Concealed, HEAT	LU5
Option	AHM Heavy Missile	F	-2	x40	3	0	Smart 2, Clumsy, Heavy	Option
Option	A6 Particle Cannon	F	0	x12	3	0	Haywire, Heat, Attenuating Damage 1	Unl.

OGL STAT BLOCK

Type:	Giant Robot
Size:	Gargantuan (Tall, 15.4 m)
Hit Points:	66 (MP: 52)
Occupancy:	1 operator, no cargo (MP: 10)
Armor Hardness:	26 (MP: 130)
Defense:	6
Strength:	55 (+22) (MP: 135)
Speed:	Land 36 kph, Realistic Space Flight (Thrust 1.4g, G-Round 150) (MP: 78+546)
Tactical Speed:	Land 60 m
Initiative:	-2 (MP: 10)
Maneuver:	-2 (MP: 10)
Total MP Cost:	1712

Total Money Cost:	342,400 credits
Special Abilities:	
Booster (Space, 2.8g, G-Round 25, MP: 182), Chobham Armor (MP: 26), Tactical Radio (Secure, MP: 4), Laser Com (Secure, Interplanetary, MP: 14), Laser and Radar Warning Receivers (MP: 4), Ejection Seat (MP: 3), Life Support (MP: 16), Searchlights (MP: 2), Jumping (x5, MP: 20), GPS (MP: 2), Radar (2 km, MP: 30), Magnetic Sensor (2 km, MP: 6), Optics (2km, MP: 4), Infrared (2km, MP: 6), Stabilization Gear (MP: 10)	
Exotic Abilities:	
Limited A.I. (Dex3, Wis3, Cha1, MP: 35)	
Mecha Defects:	
Noisy (MP: -5), Reduced Endurance (1 day, MP: -15), Start Up Time (1 minute, MP: -2)	

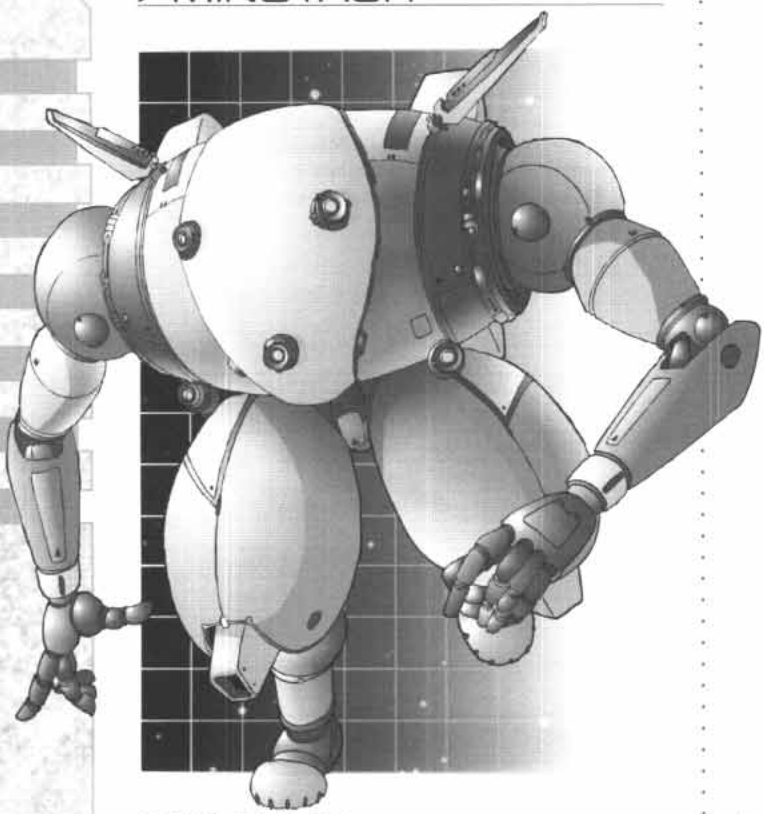
WEAPONS:

Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions	MP Cost
Massdriver Rifle*	6d12	A	240m	200	2x Automatic, 3x Extra Ammo, Long Range, Handheld	Arc of Fire (Fr)	364
ALM-16 Missiles**	10d12	SS	800m	2	Armor Penetrating, Blast, Guided (IRH,ARH, LG), Indirect, 2x Long Range	Arc of Fire (Fr), 3x Less Ammo	(357)
Head Pulse Lasers***	4d12	A	40m	240	2x Automatic, 3x Extra Ammo	Arc of Fire (Fr), Short Range	(130)
Plasma Lances*	10d12	SS	n/a	10	Armor Penetrating, Concealed, Handheld, Increased Critical (x3)	Arc of Fire (Fr), 2x Less Ammo, Melee (Large)	(130)

NOTE: *Ballistic Weapon; **Blast Weapon; ***Energy Weapons. The missiles are Hardpoint-mounted.

7

▶ MINOTAUR



DATA

Name:	Minotaur
Production Code:	CS-04
Origin:	CEGA
Manufacturer:	Various
Type:	Trooper Exo-suit
Role:	Boarding, Close Defense, Tactical Strike
Control System:	Linear Frame
Height:	2.8 m
Width:	2.7 m
Empty Weight:	1100 kg
Loaded Weight:	1300 kg
Main Drive:	2 MW
Secondary Powerplant:	90 KW
Apogee Motors:	24
Ground Speed:	24 kph
Acceleration:	1.1 g
Onboard Sensors:	Fire Control Radar, Infrared, Ladar, Motion Detectors, Radcounter, Thermograph
Fixed Armament:	n/a
Additional Armament:	1 x Rifle, 2 x Grenades, 1 x Hummer Blade
Defensive Systems:	Mag Screen
Equipment:	n/a

◇ OVERVIEW

The Minotaur is the basic trooper exo-suit of the CEGA Naval Forces. Unlike the suits deployed by the ground-based CEGA forces, it is fully adapted to the vacuum environment. The suit has built-in propulsion and life support units and suffers no loss of flight-performance due to its numerous vernier rockets.

The operator of a Minotaur stands in the middle of the exo-suit, his lower body completely encased from the hip down in the thighs of the machine. An amplification sensor mechanism moves the suit's lower legs following the limited movements of the operator. Once slipped in, the operator only has to fasten the heavy body restraint unit and don the waldos which command the arms. The internal monitor gives the pilot an external view that shows the suit's surroundings as if the entry hatch was made of non-reflective glass.

◇ CAPABILITIES

The Minotaur is large and impressive, a feature that is sometimes a blessing and at other times a curse. While it is nearly impervious to most types of man-portable weapons currently in service, its bulk makes it difficult to use within confined environments, such as human-sized corridors. Engineers have been forced to take this into account when designing new habitats and military space stations.

Minotaurs are currently stationed on all CEGA military stations and outposts in the Earth-Moon system. The lunar model is slightly different, being equipped with somewhat larger feet, but all share the same basic frame. CEGA ships typically carry a pair of Minotaurs for security and maintenance work, although few captains keep them in a ready state.

SILCORE STAT BLOCK

Name:	CS-04 MINOTAUR
Size:	4 (1300kg)
*Defensive Threat Value (DTV)	
Movement:	Walk 2/4
Space 6/11	
Maneuver:	0
Armor:	8/16/24
*Miscellaneous Threat Value (MTV)	
Crew:	Living 1

Deployment Range:	150 Km
Reaction Mass:	150 BP
Perks and Flaws: Accessory: Life Support; Armor Quality: HEAT Resistant 2; Arms: 2x Manipulator Arm 4; Hostile Environment Protection: Radiation 3, Vacuum; Reinforced Systems: Backups, Crew; Weakness: Weak Point (Walker Movement) 2; Negative Feature: Sensor Dependent	

*Offensive Threat Value (OTV)

Quantity	Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
1	AC4 Rifle	F	0	x5	2	2	-	20
1	N6 Grenade	F	-1	x10	Melee	0	Area Effect 0, Anti-Infantry	2
1	ACH16 Heavy Rifle	F	0	x8	5	0	Armor Piercing, Heavy	8
1	Hummer Blade	F	0	x4	Melee	0	Armor Piercing	Unl.

OGL STAT BLOCK

Type:	Mecha Suit
Size:	Large (Tall, 2.8 m)
Hit Points:	40
Occupancy:	1 person, no cargo
Armor Hardness:	12
Defense:	n/a
Strengh:	n/a
Speed:Walk x 1.5, Realistic Space Flight (0.6 g, G-Round 25)	
Tactical Speed:	Walk x 1.5
Initiative:	-1
Maneuver:	-1

Special Abilities:	Booster (Space 1.1 g, G-Round 10), Chobham Armor, Comm (Tactical Radio, Laser Comm, Microwave; Secure), Laser/Radar Warning Receivers, Life Support, Nav System (GPS), Sensors (Optics, Low-Light, Radar, Magnetic; all 2 km), Stabilization Gear
Exotic Abilities:	None
Mecha Defects:	Reduced Endurance (few hours), Start Up Time (1 minute)

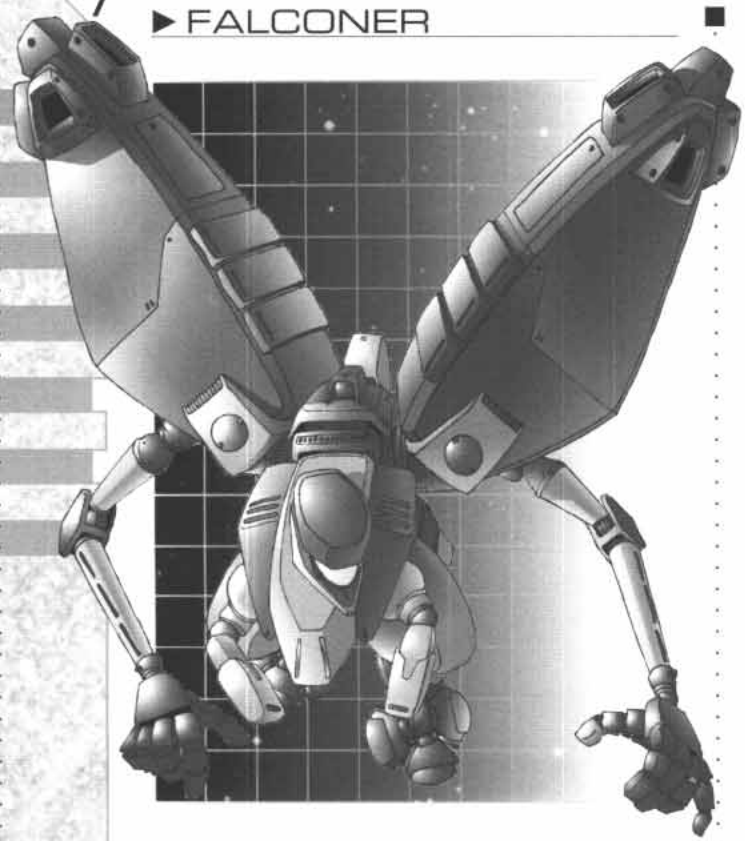
Weapons:

Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions
Rifle*	2d12	S	80m	20	-	Arc of Fire (Front)
Grenades**	4d12	SS	20m	2	Blast	Arc of Fire (Front)
Blade***	3d8	S	Melee	Unl.	AP	Arc of Fire (Front)

*Ballistic; **Blast; ***Slashing

7

▶ FALCONER



DATA

Name:	Falconer
Production Code:	ES-03
Origin:	Jovian Confederation
Manufacturer:	Various
Type:	Trooper Exo-suit
Role:	Close Defense, Tactical Strike
Control System:	Linear Frame
Height:	2.2 m
Width:	2.8 m
Empty Weight:	600 kg
Loaded Weight:	800 kg
Main Drive:	3 MW
Secondary Powerplant:	120 KW
Apogee Motors:	40
Ground Speed:	24 kph
Acceleration:	1.5 g
Onboard Sensors:	Fire Control Radar, Infrared, Ladar, Motion Detectors, Radcounter, Thermograph
Fixed Armament:	n/a
Additional Armament:	1 x Rifle, 6 x Missiles, 1 x Plasma Lance
Defensive Systems:	Mag Screen
Equipment:	Target Designator

◇ OVERVIEW

The Falconer is the standard Jovian space exo-suit. Though small, when correctly used it can be a threat to units many times its own size. Its acceleration rate is comparable to many fighting spacecraft, and it carries enough reaction mass in its oversized shoulder pods to outlast many other exo-suit designs. The smaller models of guided missiles can even be mounted on hardpoints located on the shoulders.

The pilot of a Falconer enters the suit by the upper torso hatch, to which the helmet is attached by a rotation collar. Many crews have compared wearing a Falconer to riding a bicycle, as the overall posture is very similar. The operator's legs fit within recesses in the upper thighs, where they can activate the complex actuator and shock absorber mechanisms of the lower legs as well as part of the thruster array. The oversized slave arms are controlled through a pair of small master arms located to the side of the torso. The flight controls are located on the master arms' joysticks.

◇ CAPABILITIES

The insectile-form of the Falconer is commonly seen in or around the various Jovian stations, performing patrols or security duties. JAF space ships that have built-in cargo holds carry at least two of these, especially those that cannot carry exo-armors or fighters.

SILCORE STAT BLOCK

Name:	FALCONER
Size:	2 (800kg)
*Defensive Threat Value (DTV)	
Movement:	Walk 2/4
Space 8/15	
Maneuver:	Walk 0
	Space +1
Armor:	6/12/18
*Miscellaneous Threat Value (MTV)	

Crew:	Living 1; Computer 1 (Dumb, Level 2)
Deployment Range:	150 Km
Reaction Mass:	240 BP
Perks and Flaws: Accessory: Autopilot, Life Support, Escape System; Armor Quality: HEAT Resistant 2; Arms: 2x Manipulator Arm 2, 2x Tool Arm 1; Hostile Environment Protection: Radiation 3, Vacuum; Reinforced Systems: Backups, Crew; Movement Flaw: Decreased Maneuver 1	

*Offensive Threat Value (OTV)

Quantity	Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
1	Rifle	F	0	x6	4	2	-	20
1	Light Missile	F	-2	x5	3	0	Guided	4
1	Heavy Missile	F	-2	x8	5	0	Guided	2
1	Plasma Lance	F	0	x6	Melee	0	Armor Crushing, Concealed, HEAT	LU3

OGL STAT BLOCK

Type:	Mecha Suit
Size:	Large (Tall, 2 m)
Hit Points:	30
Occupancy:	1 person, no cargo
Armor Hardness:	10
Defense:	n/a
Strengh:	n/a
Speed:Walk x 1, Realistic Space Flight (0.8 g, G-Round 30)	
Tactical Speed:	Walk x 1
Initiative:	-1
Maneuver:	0

Special Abilities:	Booster (Space 1.6 g, G-Round 15), Chobham Armor, Comm (Tactical Radio, Laser Comm, Microwave; Secure), Extra Arms (2); Laser Designator; Laser/Radar Warning Receivers, Life Support, Nav System (GPS), Sensors (Optics, Low-Light, Radar, Magnetic; all 2 km), Stabilization Gear
Exotic Abilities:	Limited A.I. (Dex 3, Wis 3, Cha 1)
Mecha Defects:	Reduced Endurance (few hours), Start Up Time (1 minute)

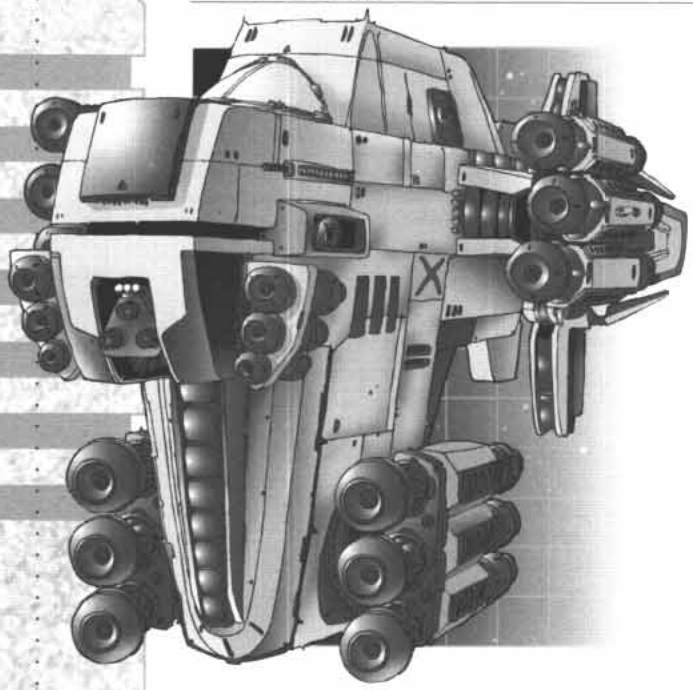
Weapons:

Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions
Rifle*	2d12	S	80m	20	-	Arc of Fire (Front)
Light Missiles**	3d10	A	90m	4	AP, Blast, Guided (IRH, ARH, LG), Indirect	Arc of Fire (Front)
Hvy. Missiles**	4d12	A	160m	2	AP, Blast, Guided (IRH, ARH, LG), Indirect	Arc of Fire (Front)
Lance***	3d8	S	Melee	Unl.	AP	Arc of Fire (Front)

*Ballistic; **Blast; ***Plasma

7

▶ BRICRIU



◇ OVERVIEW

The many ships of the Bricriu-class actually predate the formation of CEGA. The Bricriu, first vessel to bear the name, was launched from Dock 3A at the L5 point in 2134. It was the first patrol ship commissioned by the Orbital Colonies to defend the cylinders in case conflicts "spilled out" of the Earth's atmosphere. The ships proved to be exceptionally sturdy and rugged, and so the design was not retired in 2160 as originally planned, but merely refitted and updated with modern equipment. The original scatter missile launchers were replaced by the now familiar kinetic kill cannon clusters when the CEGA Navy took over in 2184, lowering firepower in favor of greater range.

Visually, the hull design of the Bricriu looks like an elongated needle with a prominent bulge in the middle. The bulge contains the secondary fusion generator as well as the power converters for the ship's many weapon turrets. The many crew decks are located in the middle and forward sections of the space ship, linked by a series of small access shafts. The rear half of the hull is occupied by the reaction mass tanks (which also serve as secondary radiation shielding to the crew), followed by the plasma combustion chamber itself.

DATA

Name:	Bricriu-class Corvette
Origin:	Central Earth Government & Administration
Manufacturer:	L5 Shipyards
Type:	Corvette
Control system:	Bridge w/ astronomical display
Length:	180 m (200 w/drive guides)
Width:	42 m
Empty Weight:	400 Tons
Loaded Weight:	800 Tons
Main Powerplant:	115 KW
Secondary Powerplant:	1200 KW
Main Thruster:	1 x 1,000,000 kg
Apogee Motors:	50
Acceleration:	0.5 g
Avionics: Fire Control Radar, Infrared/Ultraviolet, Ladar, Magnetic Anomaly Detector, Microwaves, Motion Detectors, Radcounter, Search Radar, Telescope	
Fixed Armament:	Beam Cannons, PDS, Kinetic Kill Cannons
Additional Armament:	Varies
Defensive Systems:	Mag Screen
Equipment:	Escape Pods

◇ CAPABILITIES

Living accommodations aboard the Bricriu vessels are best described as "cramped." Each crewman is only given a few cubic meters of space, and quarters are little more than one-man bunks with opaque curtains for privacy. Many have compared the Bricriu design philosophy to that of the German WWII U-Boat submarines, both in terms of striking power and living conditions.

◇ SERVICE RECORD

The Bricriu-class vessels currently serve as light escort units and area patrol ships. They are expected to be replaced by a new, more advanced design within the next decade. The existing ships will be slowly transferred to second line units or coast guard groups, while the most ancient will be recycled or stripped down and sold as private vessels.

When deployed as part of a fleet or large battlegroup, Bricrius often serve as flanking units, using their low signature to slip around enemy formations at high speed and coming back into their rear arc. Most of the time, however, they are deployed as single hunters, coasting discreetly in search of a prey. Since the ship may be called to do this for several weeks or even months, tensions often rise aboard the cramped vessel, and Bricrius have the highest defection and assignment turnaround rates in the CEGA Naval Forces.

SILCORE STAT BLOCK

Sections: 1 x Main Hull, 2 x KKC Turret, 2 x Beam Turret, 1 x Drive Section Total MP: Space 3/5
MAIN HULL
Basic Attributes:Size 21, Movement: Towed by Drive Section, Armor: 50/100/150, Crew: Living: 18, Computer 2 (Dumb, Level 3); Deployment Range: 3000 hrs
Perks and Flaws:Accessory: Autopilot, Life Support, Escape System (40-Place Pods); Comm (0/10 km); Features: Accommodations (3500 m3), Cargo Bay (100 m3); Hostile EnvironmeAllont Protection: Radiation 4, Vacuum; Sensors (0/2 km); Reinforced Systems: Backups, Crew x 2; Negative Features: Large Sensor Profile 3
Offensive & Defensive Systems: PDS x 1
KKC TURRET
Basic Attributes:Size 22, Movement: Towed by Drive Section, Armor: 20/40/60, Crew: Living 3, Deployment Range: 3000 hrs
Perks and Flaws:Accessory: Life Support; Comm (-3/10 km); Hostile Environment Protection: Radiation 4, Vacuum; Sensors (-3/2 km); Reinforced Systems: Backups, Crew
Offensive & Defensive Systems: KKC x 3
BEAM TURRET
Basic Attributes:Size 16, Movement: Towed by Drive Section, Armor: 50/100/150, Crew: Living 3, Deployment Range: 3000 hrs
Perks and Flaws:Accessory: Life Support; Comm (-3/10 km); Hostile Environment Protection: Radiation 4, Vacuum; Sensors (-3/2 km); Reinforced Systems: Backups, Crew
Offensive & Defensive Systems: Beam Cannon x 3
DRIVE SECTION
Basic Attributes:Size 21, Movement 7/14, Maneuver: -3, Armor: 50/100/150, Crew: Living 6, Deployment Range: 3000 Hrs
Perks and Flaws:Accessory: Life Support, Escape System (10-Place Pods); Hostile Environment Protection: Radiation 4, Vacuum; Reinforced Systems: Backups, Crew 1
OFFENSIVE & DEFENSIVE SYSTEMS

Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
PDS (ranged)	T	+1	x8	1	6	AM, HEAT	Unl.
PDS (shield)	FF	+1	x20	M	4	Def, E-Shield, HEAT	Unl.
Kinetic Kill Cannon	R/L	-1	x25	6	3	AP	300
Beam Cannon	R/L	-1	x20	5	0	Haywire, HEAT, AD 1	Unl.

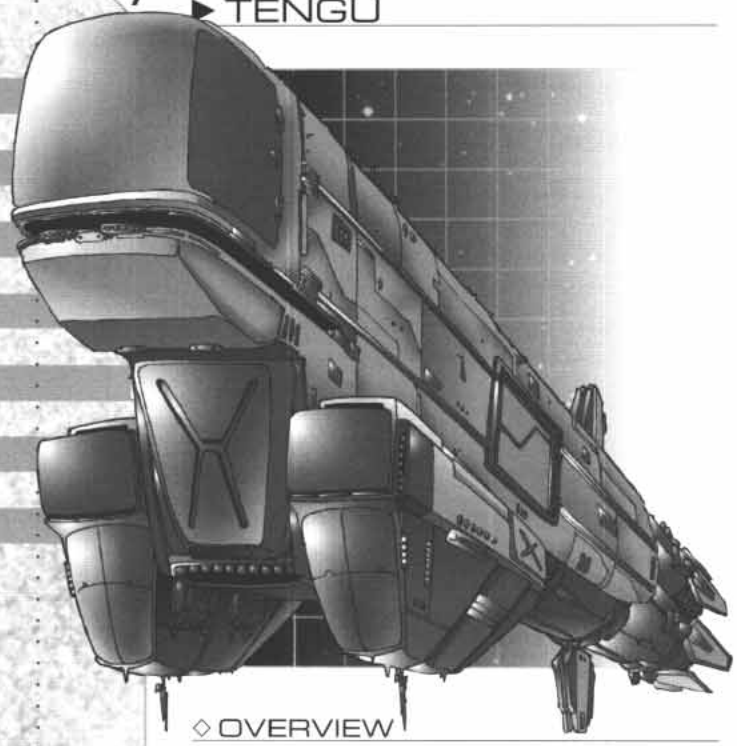
OGL STAT BLOCK

Type:	Vehicle
Size:	Colossal (Long, 180 m)
Hit Points:	180
Occupancy:	6 operators, 30 crew, 10 tons of cargo
Armor Hardness:	30
Speed:	Space 0.3 g (5000 G-Rounds)
Tactical Speed:	n/a
Initiative:	-6
Maneuver:	-6

Special Abilities: Booster (Space 0.5 g, G-Round 2000), Comm (LR Radio, Laser Comm, Microwave; Interplanetary, Secure), Ejection Pods, Laser and Radar Warning Receivers, Life Support, Nav Systems (GPS), Rooms: Kitchen, Sickbay, Workshop, Sensors (Optics, Low-Light, Hi-res Radar, Magnetic; all Global, 2 km), Stabilization Gear, Targeting Bonus (PDS, +2)
Exotic Abilities: Limited A.I. (Dex 10, Wis 10, Cha 1)
Mecha Defects:Reduced Endurance (a few weeks), Start Up Time (10 minutes), Noisy

Weapons:						
Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions
PDS (Ranged)*	4d12	A	80m	Unl.	-	-
PDS (Shield)*	9d12	A	Melee	Unl.	-	Arc of Fire (Forward)
Beam Cannon**	9d12	SS	720m	Unl.	Increased Threat (19-20)	-
KKC***	10d12	A	800m	3000	AP	-
NOTE: *Laser; **Plasma/Electrical; ***Ballistic						

7 ▸ TENGU



◇ OVERVIEW

As the CEGA began to realize the tactical usefulness of exo-armors — mostly by observing the Jovian Confederation's efforts in the field — the Navy's lack of adequate vessels to carry these new weapons into combat became evident. The Tengu-class escort carrier was commissioned in 2198 and put into production in late 2201. Early tests showed that the ship's original design was lacking adequate defensive measures, and so production resumed with the new vessels sporting twin missile launcher pods at the prow.

As the new ships left the drydocks at the Moon's L2 point, they were assigned by pairs to the various Navy fleets, starting with the three Escort Fleets. They soon gained the appreciation of the men and women crewing them for their sturdiness and large living quarters. The early Tengu carried only interceptors, but selected units began receiving Syreen exo-armors as early as 2202.

◇ CAPABILITIES

The primary concerns of the ship's designers were speed and range. A large twin drive assembly is mounted on the hull along with big reaction mass tanks. For simplicity and improved resource management, the drive units are the same model as the ones used on the smaller Bricriu-class corvette.

DATA

Name:	Tengu-class Escort Carrier
Origin:	Central Earth Government & Administration
Manufacturer:	L2 Lunar Shipyards Co.
Type:	Escort Carrier
Control system:	bridge w/ astronomical display
Length:	250 m
Width:	28 m
Empty Weight:	2900 Tons
Loaded Weight:	3000 Tons
Main Powerplant:	2 x 115 MW
Secondary Powerplant:	2000 KW
Main thrusters:	2 x 350,000 kg
Apogee motors:	60
Acceleration:	0.5 g
Avionics Fire Control Radar, Infrared/Ultraviolet, Ladar, Low-light, Magnetometer, Microwaves, Motion Detectors, Radcounter, Search Radar, Telescope	
Fixed Armament:	PDS, Missile bays
Additional Armament:	Exo-armors, Fighters
Defensive Systems:	Mag screen, PDS
Equipment: Catapults, Escape pods, Satellite Uplink, Vehicle bay	

Extra reaction mass tanks are sandwiched between the drive mounts and the main vehicle bay for additional range.

The position of the drive units and the external missile launchers leaves a lot of room inside the hull, making the Tengu-class one of the most spacious in the CEGA fleet in terms of living accommodations. The mid-body vehicle bay is large, but it is normally filled with extensive stores of spare parts, fuel and additional ammunition. This leaves little space for the exo-armors themselves, only two of which can be handled during standard operations. Removal of the acceleration cradles and the spare part racks generally provide enough space to fit up to eight additional exo-armors, though they will have no support facilities available. Fuel, ammunition or spare parts are likely to be very scarce. Damage may also occur during acceleration since the load is not properly secured and may shift suddenly.

The Tengu-class ships generally have a good reputation among enlisted men. They are currently found in all six Navy fleets, serving as escort and area patrol craft. A few Tengus have been refitted with two extra vehicle bays and additional stores to accomodate special units or to go on extended patrols, but these remain somewhat rare. At last count, only about 15% of the ships in service had been so equipped.

SILCORE STAT BLOCK

Sections: 1 x Main Hull, 2 x Missile Tube, 2 x Vehicle Bay, 2 x Drive Section Total MP: Space 4/8
MAIN HULL
Basic Attributes:Size 23, Movement: Towed by Drive Section, Armor: 25/5075, Crew: Living 78; Computer 2 (Dumb, Level 2), Deployment Range: 1000 hrs
Perks and Flaws:Accessory: Autopilot, 2 x Catapult 4, Life Support, Escape Pods; Comm (0/10 km, Satellite Uplink); Features: Accommodations (24,500 m3), Cargo Bay (24,000 m3); Hostile Environment Protection: Radiation 4, Vacuum; Sensors (0/2 km); Reinforced Systems: Backups, Crew x 2; Negative Feature: Large Sensor Profile 4
Offensive & Defensive Systems: PDS x 1
MISSILE TUBE
Basic Attributes:Size 14, Movement: Towed by Drive Section, Armor: 25/50/75, Crew: Living 3, Deployment Range: 1000 hrs
Perks and Flaws:Accessory: Life Support; Comm (-3/10 km); Hostile Environment Protection: Radiation 4, Vacuum; Sensors (-3/2 km); Reinforced Systems: Backups, Crew x 2
Offensive & Defensive Systems: Missile Bay x 1
VEHICLE BAY
Basic Attributes:Size 9, Movement: Towed by Drive Section, Armor: 25/50/75, Crew: Living 3, Deployment Range: 1000 hrs
Perks and Flaws:Accessory: Life Support; Features: Cargo Bay (2000 m3); Hostile Environment Protection: Radiation 4, Vacuum; Reinforced Systems: Backups, Crew x 2
DRIVE SECTION
Basic Attributes:Size 21, Movement 7/14, Maneuver: -6, Armor: 50/100/150, Crew: Living 6, Deployment Range: 3000 hrs, Reaction Mass 15,000 BP
Perks and Flaws:Accessory: Life Support, Escape Pods; Hostile Environment Protection: Radiation 4, Vacuum; Reinforced Systems: Backups, Crew
OFFENSIVE & DEFENSIVE SYSTEMS

Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
PDS (ranged)	T	+1	x8	1	6	AM, HEAT	Unl.
PDS (shield)	FF	+1	x20	M	0	E-Shield, HEAT, Def	Unl.
Missile BayF	-2	x30	5	n/a	Mis., Concealed, Guided		60

OGL STAT BLOCK

Type:	Vehicle
Size:	Colossal (Long, 250 m)
Hit Points:	250
Occupancy:	12 operators, 90 crew, 2400 tons of cargo
Armor Hardness:	30
Speed:	Realistic Space Flight (0.4 g, 2000 G-Rounds)
Tactical Speed:	n/a
Initiative:	-11
Maneuver:	-10

Special Abilities: Booster (Space 0.8 g, G-Rounds 500), Comm (LR Radio, Laser Comm, Microwave; Interplanetary, Secure), Ejection Pods, Hangar (Gar.), Launch Catapult (Gar.) x 2, Laser and Radar Warning Receivers, Life Support, Nav Systems (GPS), Rooms: Kitchen, Sickbay, Workshop, Sensors (Optics, Low-Light, Hi-res Radar, Magnetic; all Global, 2 km), Stabilization Gear, Targeting Bonus (PDS, +2)
Exotic Abilities: Limited A.I. (Dex 10, Wis 10, Cha 1)
Mecha Defects:Reduced Endurance (a few weeks), Start Up Time (10 minutes), Very Noisy

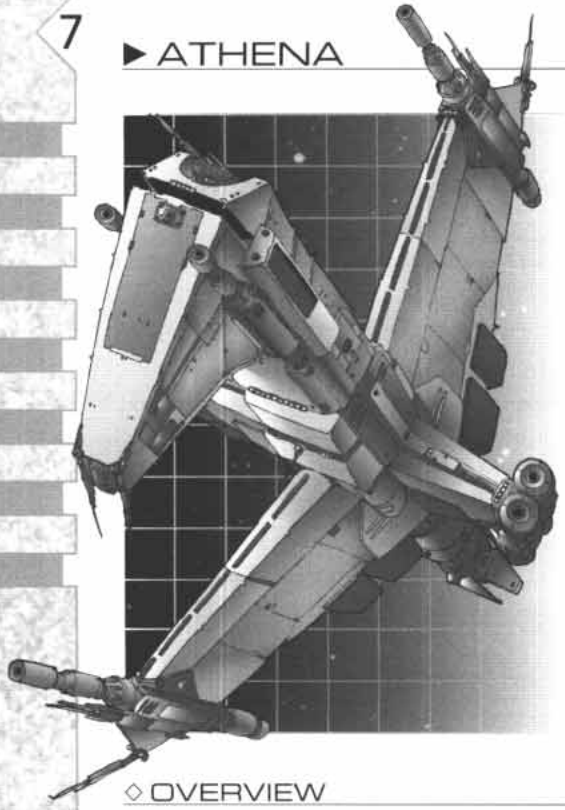
Weapons:

Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions
PDS (Ranged)*	4d12	A	100m	Unl.	-	-
PDS (Shield)*	9d12	A	Melee	Unl.	-	-
Missiles**	15d10	A	960m	90	AP, Blast, Guided (IRH, ARH, LG), Indirect	Arc of Fire (Front)

NOTE: *Laser; **Blast

7

▶ ATHENA



DATA

Name:	Athena-Class Destroyer
Origin:	Jovian Confederation
Manufacturer:	Athena Shipyards
Type:	Destroyer
Control system:	Bridge w/astronomical display
Length:	291 m
Width:	81 m
Empty Weight:	5000 Tons
Loaded Weight:	5900Tons
Main Powerplant:	2 x 25 MW
Secondary Powerplant:	4000 KW
Main Thruster:	2 x 12,000,000 kg
Apogee Motors:	68
Acceleration:	0.6 g
Avionics:Fire Control Radar, Infrared/Ultraviolet, Ladar, Magnetometer, Microwaves, Motion Detectors, Radcounter, Search Radar, Telescope	
Fixed Armament:	PDS, Kinetic Kill Cannons, Missile Bays, Laser Cannons
Additional Armament:	N/A
Defensive Systems:	Mag Screen
Equipment:	Escape Pods, Satellite Uplink

◇ OVERVIEW

The Athena-class destroyers are fairly recent additions to the Jovian fleet. They were commissioned by President Itangre herself in 2208. Their subsequent arrival allowed the bulk of the fleet to concentrate on search and rescue operations rather than picket duties. Athenas have thus started to get a reputation as vigilant protector of the innocents in the eyes of the Jovian people.

Athena destroyers can only be described as graceful when in flight. Their large wing-like heat sinks, located above and below the main hull, give them the aggressive allure of a pre-spaceflight sailing vessel. The large twin plasma drive assembly allows them to follow the speed new Valiant-class strike carrier, which adds to their mystique. The destroyers are also unusually maneuverable for ships of their size, a design feature made necessary by the fixed angle of fire that limits many of the ship's weapons.

◇ CAPABILITIES

These destroyers definitely live up to their namesake: they are made to destroy, and are well-equipped to do so. A deadly array of linked kinetic kill cannons gives them great punch, though they lack range and may run out of ammunition. The cannons are backed up by a pair of hidden missile bays which are usually kept for heavy bombardment of large capital ships or stations. The real punch of the design comes from the twin laser assemblies located in the vertical fins. These lasers are so large that they must be placed perpendicular to the hull. The lasing apparatus follows the length of the fin, and a set of optics near the tip redirect the resulting beam toward its target. Most of the fins' structure is made up of the power supplies and cooling equipment required to fire the weaponry.

Many crewmen have said that the Athena was "a capital ship that thinks it's a fighter." While this is a gross exaggeration, the destroyer is quite agile, and matches ships half its size and mass with its maneuverability. This is due to the ingenious disposition of the various vernier clusters that enables the ship to change its position in space. Most of them are located on the tips of the fins and around the prow, which gives them long moment arms.

Most of the ships currently in service are assigned to Alpha and Gamma Division, with Beta in line for the next three vessels wich are scheduled to come out of the shipyards within the next two years.

SILCORE STAT BLOCK

Sections: 1 x Main Hull, 2 x Drive Section, 2 x KKC Turret, 2 x Wings w Laser Cannon Total MP: Space 3/5							
NAME: MAIN HULL							
Basic Attributes:Size 34, Movement 3/5; Maneuver: -4, Armor: 50/100/150, Crew: Living 6; Computer 3 (Dumb, Level 4), Deployment Range: 1000 Hrs							
Perks and Flaws:Accessory: Autopilot, Life Support, Escape System (90-Place Pods); Comm (0/10 km, Satellite Uplink); Features: Accommodations (10,000 m3); Hostile Environment Protection: Radiation 4, Vacuum; Sensors (0/2 km); Reinforced Systems: Backups, Crew 2							
Offensive & Defensive Systems: PDS x 1, KKC(F) x 2, Missile Bay x 1							
KKC TURRET							
Basic Attributes:Size 10, Movement: towed by Drive Section, Armor: 25/50/75, Crew: Living 3, Deployment Range: 1000 Hrs							
Perks and Flaws:Accessory: Life Support; Comm (-3/10 km); Hostile Environment Protection: Radiation 4, Vacuum; Sensors (-3/2 km); Reinforced Systems: Backups, Crew 2							
Offensive & Defensive Systems: KKC x 2							
WINGS							
Basic Attributes:Size 10, Movement: towed by Drive Section, Armor: 25/50/75, Crew: Living 3, Deployment Range: 1000 Hrs							
Perks and Flaws:Accessory: Life Support; Comm (-3/10 km); Hostile Environment Protection: Radiation 4, Vacuum; Sensors (-3/2 km); Reinforced Systems: Backups, Crew 2							
Offensive & Defensive Systems: KKC(F) x 1, Laser Cannon x 1							
NAME: DRIVE SECTION							
Basic Attributes:Size 21, Movement 3/5, Maneuver: -3, Armor: 50/100/150, Crew: Living 6, Deployment Range: 1000 Hrs							
Perks and Flaws:Accessory: Life Support, Ejection System (40-Place Pods); Comm: (-3/10 km); Hostile Environment Protection: Radiation 4, Vacuum; Sensors (-3/2 km); Reinforced Systems: Backups, Crew 2							
OFFENSIVE & DEFENSIVE SYSTEMS							
Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
PDS (ranged)	T	+1	x10	1	6	AM, HEAT	Unl.
PDS (shield)	FF	+1	x20	M	0	Def, E-Shield, HEAT	Unl.
KKC(F) FF	-2	x30	7	3	AP	300	
KKC R/L	-2	x30	7	3	AP	300	
Laser Cannon	FF	-2	x40	10	0	HEAT, AD 5, Power Hungry 6	Unl.
Missile bay F	-2	x30	5	5	Concealed, Guided		30

OGL STAT BLOCK

Type:	Vehicle
Size:	Colossal (Long, 291 m)
Hit Points:	290
Occupancy:	12 operators, 36 crew, 2 tons of cargo
Armor Hardness:	30
Speed:	Realistic Space Flight (0.4 g, 1300 G-Rounds)
Tactical Speed:	n/a
Initiative:	-9
Maneuver:	-10

Special Abilities: Booster (Space 0.8 g, 400 G-Rounds), Comm (LR Radio, Laser Comm, Microwave; Interplanetary, Secure), Ejection Pods, Laser and Radar Warning Receivers, Life Support, Nav Systems (GPS), Rooms: Kitchen, Sickbay, Workshop, Sensors (Optics, Low-Light, Hi-res Radar, Magnetic; all Global, 5 km), Stabilization Gear, Targeting Bonus (PDS, +2)
Exotic Abilities: Limited A.I. (Dex 14, Wis 10, Cha 1)
Mecha Defects:Reduced Endurance (a few weeks), Start Up Time (10 minutes), Noisy

Weapons:						
Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions
PDS (Ranged)*	4d12	A	80m	Unl.	-	-
PDS (Shield)*	9d12	A	Melee	Unl.	-	-
4 x KKC**	10d12	A	800m	3000	AP	Arc of Fire (Front)
4 x KKC**	10d12	A	800m	3000	AP	-
Wing Laser*	30d10	SS	225m	4	-	Slow-Firing
NOTE: *Laser; **Ballistic						

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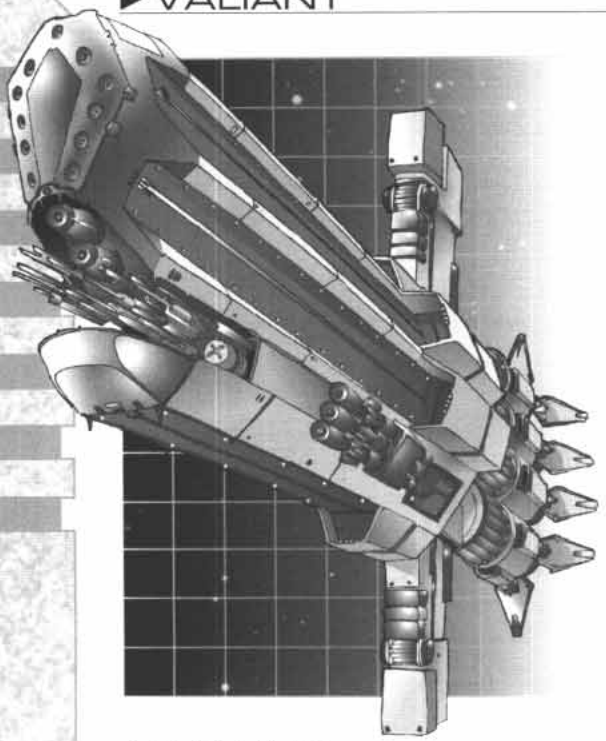
▶VALIANT



DATA

Name:	Valiant
Origin:	Jovian Confederation
Manufacturer:	Valiant Consortium
Type:	Strike Carrier
Control system:	bridge w/astronomical display
Length:	320 m
Width:	75 m
Empty Weight:	29,000 Tons
Loaded Weight:	50,000 Tons
Main Drive:	4 x 0.8 GW
Secondary Powerplant:	2 x 6900 KW
Main Thrusters:	4 x 13,750 tons
Apogee Motors:	100
Acceleration:	0.8 g
Avionics Fire Control Radar, Infrared/Ultraviolet, Ladar, Low-light, Magnetic Anomaly Detector, Microwaves, Motion Detectors, Radcounter, Search Radar, Telescope	
Fixed Armament:PDS, 6 x Kinetic Kill Cannons, 1 x Missile Bay, 1 x Spinal Laser	
Additional Armament:	Auxiliary Craft
Defensive Systems:	Mag Screen, PDS
Equipment: Catapult, Centrifuge, Escape Pods, Satellite Uplink, Vehicle Bay	

◇OVERVIEW

The Valiant-class Strike Carrier was already on the drawing board when the Battle of Elys_e took place. If anything, the conflict provided a much-needed impetus that accelerated the progress of Proposal 99, an advanced JAF program dedicated to supplying the Jovian Confederation with a line of vessels that could serve as roving defense outposts. These highly sophisticated ships would be able to accomplish long patrols on the fringes of Jovian space while still being able to pull their weight as dedicated front-line battle units. Funds were rapidly allocated by the Agora so that three ships were ready by the time 2210 closed.

Once in the testing phase, the three Valiant-class vessels proved to be unusually sturdy and resilient, routinely escaping damage and facing tough situations that would have rendered any other ship inoperable. The Valiant itself, first ship of the class, survived multiple enemy attacks during its shakedown cruise and came back home mostly intact (see page 208 of the Jovian Chronicles Rulebook for the full story).

◇CAPABILITIES

The Valiant's quadruple engine pods supply it with high thrust, though the drives are seldom used to save reaction mass on long trips. The Valiant is probably one of the fastest warships ever designed, and outperforms all current military ships in terms of acceleration. The ship is heavily armed and armored, and features deployable habitat sections that are always oriented correctly for gravity purposes, increasing crew comfort on long patrols.

Though much of the internal space of the ship is taken up by consumables, additional stores and machinery, the crew quarters are relatively spacious and comfortable. Each crewman is assigned to a two-man cabin, each with two private bunks, lavatory and small desk with personal computer. Commons and a galley are available in all three main crew areas, and function around the clock to service the three shifts that operate the vessel.

The Agora is debating whether or not the vessels are worth their exorbitant price and prefers to wait until all testing is completed before permitting the expenses of additional ships. Many local representatives are asking that the program be scaled back to a series of smaller carriers and auxiliary tankers that would be able to fulfill much the same mission but at a reduced cost to the Jovian treasury. Only the future will tell if the Valiant and its sister ships will be more than a footnote in Jovian military history.

SILCORE STAT BLOCK

Sections: 1 x Main Hull, 2 x Habitat Section, 2 x Kinetic Kill Cannon Turret, 4 x Drive Section Total MP: Space 4/8							
NAME: MAIN HULL							
Basic Attributes:Size 90 (Long, 220 m), Movement: Towed by Drive Sections, Armor: 100/200/300, Crew: Living 260; Computer 4 (Dumb, Level 3), Deployment Range: 4000 hrs							
Perks and Flaws:Accessory: Autopilot, 6 x Catapult 3, Life Support, Escape System; Comm (0/15 km, Satellite Uplink); Features: Accomodations (15,000 m^3), Cargo Bay (80,000 m^3); Hostile Environment Protection: All, Radiation 4, Sickbay 2; Sensors (+1/5 km); Reinforced Systems: Backups, 3 x Crew; Negative Feature: Large Sensor Profile 5							
Offensive & Defensive Systems: PDS x 1, Missile Bay x 1, Spinal Laser x 1							
NAME: HABITAT SECTION							
Basic Attributes:Size 20 (Tall, 120 m), Movement: Towed by Drive Sections, Armor: 50/100/150, Crew: Living 12, Deployment Range: 4000 hrs							
Perks and Flaws:Accessory: Life Support x 2, Escape System; Comm (-3/10 km); Features: Accomodations (20,000 m^3), Cargo Bay (800 m^3), Laboratory (Cooking); Hostile Environment Protection: All, Radiation 4; Sensors (-3/2 km); Reinforced Systems: 3 x Crew							
NAME: KKC TURRET							
Basic Attributes:Size 10 (Long, 40 m), Movement: Towed by Drive Sections, Armor: 25/50/75, Crew: Living 3, Deployment Range: 4000 hrs							
Perks and Flaws:Accessory: Life Support; Comm (-3/10 km); Hostile Environment Protection: All, Radiation 4; Sensors (-3/2 km); Reinforced Systems: 2 x Crew							
Offensive & Defensive Systems: KKC x 3 (all linked)							
NAME: DRIVE SECTION							
Basic Attributes:Size 42 (Long, 65 m), Movement: Space 14/28, Maneuver: -5, Armor: 50/100/150, Crew: Living 16, Deployment Range: 4000 hrs, Reaction Mass: 17,500 BP							
Perks and Flaws:Accessory: Life Support; Hostile Environment Protection: Radiation 4, Vacuum; Reinforced Systems: Backups, 2 x Crew; Reinforced Location: Movement x 2							
OFFENSIVE & DEFENSIVE SYSTEMS							
Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
PDS (ranged)	T	+1	x10	1	6	AM, HEAT	Unl.
(shield)	FF	+1	x25	M	4	Def., E-Shield, HEAT	Unl.
Missiles	F	-2	x40	5	n/a	Missile, Guided	90
Kinetic Kill Cannon	Side	-2	x30	7	3	AP	3000ea
Spinal Laser	FF	-2	x80	3	0	PH9, HEAT	4

OGL STAT BLOCK

Type:	Vehicle
Size:	Colossal (Long, 320 m)
Hit Points:	320
Occupancy:	12 operators, 342 crew, 9000 tons of cargo
Armor Hardness:	30
Speed:	Space 0.8 g (1750 G-Rounds)
Tactical Speed:	n/a
Initiative:	-9
Maneuver:	-10

Special Abilities:Comm (LR Radio, Laser Comm, Microwave; Interplanetary, Secure), Ejection Pods, Hangar (Gar.), Launch Catapult (Gar.) x 6, Laser and Radar Warning Receivers, Life Support, Nav Systems (GPS), Rooms: Kitchen x 2, Sickbay x 2, Workshop, Sensors (Optics, Low-Light, Hi-res Radar, Magnetic; all Global, 5 km), Stabilization Gear
Exotic Abilities: Limited A.I. (Dex 16, Wis 16, Cha 1)
Mecha Defects:Reduced Endurance (a few weeks), Start Up Time (10 minutes), Very Noisy

Weapons:						
Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions
PDS (Ranged)*	4d12	A	100m	Unl.	-	-
PDS (Shield)*	9d12	A	Melee	Unl.	-	-
Missiles**	15d10	A	960m	90	AP, Blast, Guided (IRH, ARH, LG), Indirect	Arc of Fire (Front)
KKC***	10d12	A	1200m	3000	AP	-
Spinal Laser	30d10	SS	160m	4	-	Slow-Firing
NOTE: *Energy; **Blast; ***Ballistic						

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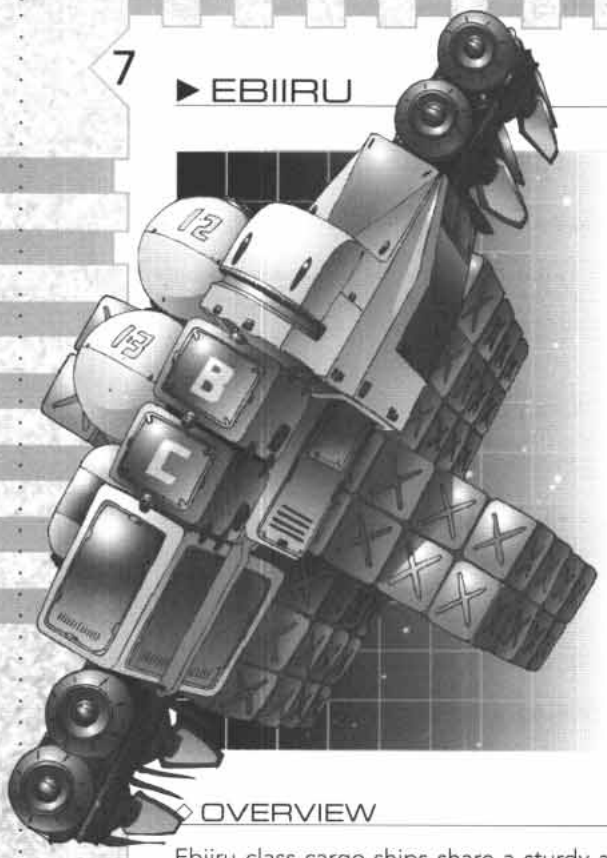
▶ EBIIRU



DATA

Name:	Ebiiru
Origin:	Various
Manufacturer:	Various
Type:	Cargo Ship
Control System:	Bridge
Length:	345 m
Width:	40 m
Empty Weight:	3450tons
Loaded Weight:	38,000 Tons
Main Drive	4 X 0.2 GW
Secondary Powerplant:	2 X 6740 KW
Main Thruster:	4 X 1,000,000 Kg
Apogee Motors:	20
Acceleration:	0.4 G
Avionics:Fire Control Radar, Infrared/Ultraviolet, Ladar, Magnetometer, Radcounter, Telescope	
Fixed Armament:	Point Defense System (Pds)
Additional Armament:	n/a
Defensive Systems:	Mag Screen
Equipment:	Cargo Module Hardpoints, Escape Pods, Satellite Uplink

◇ OVERVIEW

Ebiiru-class cargo ships share a sturdy and common design that dates back to the earliest phases of the commercial exploitation of space. Ships of this class are in service with virtually every settlement of the solar system, particularly by Mercury's commercial fleet. These fusion-driven cargo vessels are used whenever a cargo needs to arrive rapidly, and cannot wait to go via one of the regular but slower clipper flights.

The external appearance of the ship is blocky and massive, with little thought given to esthetic concerns. The Ebiiru is practical above anything else, and its surface is bristling with hardpoints and tie-down rings where cargo, either in the form of modular pods or free flying, can be attached.

◇◇ CAPABILITIES

The ship has no internal cargo bay, rather, it tows a large structure called a "tree," to which various cargo pods are attached. Power and atmosphere hook-ups can be run from the pod to the tree if the cargo needs such amenities, but people generally require a separate life support system in the pods due to the limits of this hook-up. The tree sections can be attached to one another to form a train of sorts, though this greatly reduces the possible acceleration (and thus increase the duration of the voyage). This fact makes speedy deliveries limited to either small cargos or those who can afford to pay for multiple ships to transport goods.

The Ebiiru is designed around a large reinforced nanogrown spar that runs from one engineering section to the other. Various types of hardpoints are available on the outer hull of the ship to affix additional cargo and reaction mass modules. Additional spars run from these to the main structure, reinforcing the structural integrity of the vessel. Although most of the internal volume of the hull is taken up by the ship's engineering systems and structure, there are many man-sized passageways running in between them for maintenance and emergency repairs. All can be partitioned and isolated at will by firewalls and airlocks.

Ebiirus are found in great quantities in the commercial fleets affiliated with the Mercurian Merchant Guild, but the design is not limited to the Guild. Indeed, many ambitious spacers have bought second-hand or reconditioned cargo ships and ply the space lanes as independent contractors, selling their services to whomever can afford their fees. Since the ships are expensive (both to buy and operate), most captains cannot afford to buy their own cargo pods, and many will ask that pods be supplied. Some other captains will rent them in a spaceport according to the needs of the contractor, but usually charge a premium for this service.

SILCORE STAT BLOCK

Sections: 1 x Main Hull, 4 x Drive Section, 1 x Tree, 2 x Crew Module, 1 x Cargo Modules Total MP: Space 1/2							
MAIN HULL							
Basic Attributes:Size 45, Movement: Space 0.01/0.02, Maneuver: -5, Armor: 50/100/150, Crew: Living 8, Computer 2 (Dumb, Level 2); Deployment Range: 5000 hrs, Reaction Mass: 49,600 BP							
Perks and Flaws:Accessories: Autopilot, Life Support, Ejection Pods; Comm: (0/12km, Satellite Uplink); Armor: Brittle; Features: Accommodations (2000 m3), Laboratory, Sick Bay; Hostile Environment Protection: Radiation 4, Vacuum; Sensors (-1/4 km); Reinforced Systems: Backups, Crew							
Offensive & Defensive Systems: PDS x 1							
DRIVE SECTION							
Basic Attributes:Size 16, Movement: Space 15/30, Maneuver: -5, Armor: 30/60/90, Crew: Living 1, Deployment Range: 5000 hrs, Reaction Mass: 100 BP (feed off main hull)							
Perks and Flaws:Accessory: Life Support, Ejection Pods; Comm: (-3/10 km); Hostile Environment Protection: Radiation 4, Vacuum; Sensors (-3/2 km); Reinforced Systems: Backups, Crew x 2							
TREE SECTION							
Basic Attributes:Size 16, Movement: Towed by Drive Section, Armor: 20/40/60, Crew: 1, Deployment Range: 5000 hrs							
Perks and Flaws: Comm: (-3/0 km); Arms: 8 x Tool Arm 20							
CREW MODULE							
Basic Attributes:Size 17, Movement: Towed by Drive Section, Armor: 20/40/60, Crew: 0, Deployment Range 5000 hrs							
Perks and Flaws:Accessory: Life Support, Ejection Pods; Comm: (-3/10km); Features: Accommodations (6000 m3), Laboratory; Hostile Environment Protection: Radiation 5, Vacuum; Sensors (-3/2 km); Reinforced Systems: Backups, Crew x 2							
CARGO MODULES							
Basic Attributes:Size 16, Movement: Towed by Drive Section, Armor: 20/40/60, Crew: 0, Deployment Range: 5000 hrs							
Perks and Flaws:Accessory: Life Support; Features: Cargo Bay (6000 m3); Hostile Environment Protection: Radiation 3, Vacuum							
OFFENSIVE & DEFENSIVE SYSTEMS							
Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
PDS (ranged)	T	-1	x8	1	6	AM, HEAT	Unl.
PDS (shield)	FF	-1	x16	M	0	Def, E-Shield, HEAT	Unl.

OGL STAT BLOCK

Type:	Vehicle
Size:	Colossal (Long, 345 m)
Hit Points:	345
Occupancy:	2 operators, 10 crew, 9000 tons of cargo
Armor Hardness:	15
Speed:	Realistic Space Flight (0.1 g, G-Round 15,000)
Tactical Speed:	n/a
Initiative:	-10
Maneuver:	-10

Special Abilities: Booster (Space, 0.2 g, G-Round 5,000), Comm (LR Radio, Laser Comm, Microwave; Interplanetary, Secure), Ejection Pods, Life Support, Nav Systems (GPS), Rooms: Kitchen, Sickbay, Workshop, Sensors (Optics, Low-Light, Radar, Magnetic; all Global, 4 km)
Exotic Abilities: Limited A.I. (Dex 10, Wis 8, Cha 1)
Mecha Defects: Start Up Time (10 minutes), Noisy

Weapons:						
Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions
PDS (Ranged)*	4d12	A	100m	Unl.	-	-
PDS (Shield)*	9d12	A	Melee	Unl.	-	-
NOTE: *Laser						

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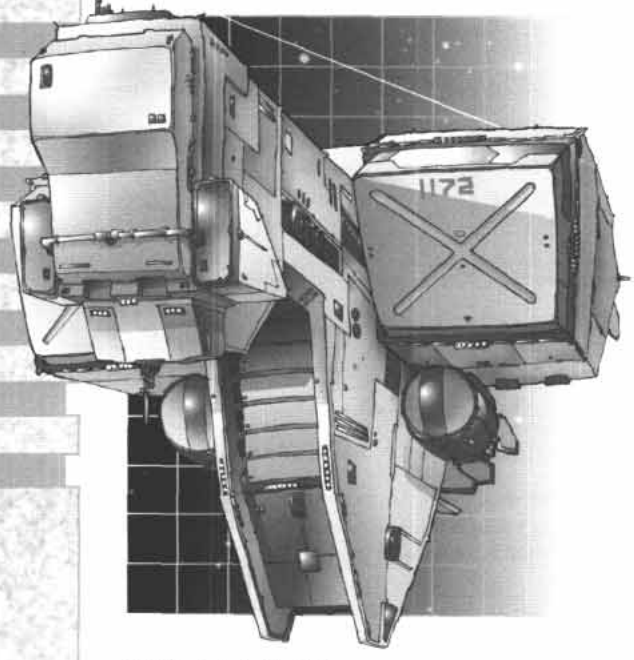
▶ INARI



DATA

Name:	Inari-class Passenger Liner
Origin:	Various
Manufacturer:	Various
Type:	Cargo/Liner Ship
Control system:	Bridge
Length:	200 m
Width:	72 m
Empty Weight:	10,000 Tons
Loaded Weight:	# Tons
Main Powerplant:	# KW
Secondary Powerplant:	# KW
Main thrusters:	2 x 2,000,000 kg
Apogee motors:	26
Acceleration:	0.4 g
Avionics Fire Control Radar, Infrared/Ultraviolet, Ladar, Search Radar, Telescope	
Fixed Armament:	PDS
Additional Armament:	n/a
Defensive Systems:	mag screen
Equipment:	escape pods, individual cargo modules

◇ OVERVIEW

Inari-class liners have a long history of reliability and endurance, having plied their trade in the solar system for more than fifty years. They have been touted as "the most efficient commercial ship in existence." Indeed, their double role as cargo and passenger liner rarely lets them leave a spaceport at less than full capacity. Their twin drive units can propel them at a significant fraction of a gee, though cargo and reaction mass reserve generally drop the ship's acceleration rate to 0.3 gee on average.

◇ CAPABILITIES

The spacious passenger lounges and cabins take up the whole center portion of the ship, just above engineering and the crew section. Most of the internal partitions are modular and can be quickly rearranged to fit the requirements of the passengers. The ship can have spacious rooms but few passengers on one flight, while having only a few common bunkhouses filled with people for the return trip.

Cargo is carried in two huge bays located on either side of the main hull, each having a separate life support system from the rest of the ship. This allows the economical transport of goods which do not necessitate an atmosphere. The cargo bays can be detached with the help of the proper facilities and replaced by other types of bay, the most common of these being large tanks capable of holding many tons of liquefied gasses.

A few Inaris have been sold to private interests and ply the solar system as free traders, luxury cruise ships or mobile stations. Like most of these venerable transport ships, they are generally extensively modified and seldom look much like the original design. Only a close examination of the lines of the hull will allow one to recognize the ship as an Inari.

SILCORE STAT BLOCK

Sections: 1 x Main Hull, 2 x Drive Section, 2 x Cargo Section, 2 x Alternate Cargo Section						Total MP: Space 3/5	
MAIN HULL							
Basic Attributes:Size 60, Movement: Towed by Drive Sections, Armor: 80/160/240, Crew: Living 24, Computer 3 (Dumb, Level 3); Deployment Range: 3000 hrs							
Perks and Flaws:Accessory: Autopilot, Life Support, Ejection Pods; Armor: Brittle; Comm: (-2/10 km, Satellite Uplink); Features: Accommodations (25,000 m3), Cargo Bay (20,000 m3), Laboratory, Kitchen, Sickbay; Hostile Environment Protection: Radiation 5, Vacuum; Sensors (-2/2 km); Reinforced Systems: Backups, Crew x 2; Negative Feature: Large Sensor Profile 5							
Offensive & Defensive Systems: PDS x 1							
DRIVE SECTION							
Basic Attributes:Size 20, Movement: Space 3/5, Maneuver: -5, Armor: 50/100/150, Crew: Living 6, Deployment Range: 3000 hrs, Reaction Mass: 3250 BP							
Perks and Flaws:Accessory: Life Support, Ejection Pods; Comm: (-3/10 km); Hostile Environment Protection: Radiation 4, Vacuum; Sensors (-3/2 km); Reinforced Systems: Backups, Crew							
CARGO SECTION							
Basic Attributes:Size 30, Movement: Space 0.3/0.6; Maneuver: -5, Armor: 50/100/150, Crew: 0, Deployment Range: 1000 hrs, Reaction Mass: 3250 BP							
Perks and Flaws:Accessory: Life Support x 2; Comm: (-3/10 km); Features: Cargo Bay (30,000 m3); Hostile Environment Protection: Radiation 4, Vacuum; Sensors (-3/2 km)							
OFFENSIVE & DEFENSIVE SYSTEMS							
Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
PDS (ranged)		T	-1	x8	1	6 AM, HEAT	Unl.
PDS (shield)		FF	-1	x16	M	0 Def, E-Shield, HEAT	Unl.

OGL STAT BLOCK

Type:	Vehicle
Size:	Colossal (Long, 220 m)
Hit Points:	220
Occupancy:	4 operators, 32 crew, 8000 tons of cargo
Armor Hardness:	15
Speed:	Realistic Space Flight (0.3 g, G-Round 5,000)
Tactical Speed:	n/a
Initiative:	-10
Maneuver:	-8

Special Abilities: Booster (Space, 0.5 g, G-Round 2,000), Comm (LR Radio, Laser Comm, Microwave; Interplanetary), Ejection Pods, Life Support, Nav Systems (GPS), Rooms: Kitchen, Sickbay, Workshop, Sensors (Optics, Low-Light, Radar, Magnetic; all Global, 2 km)
Exotic Abilities: Limited A.I. (Dex 10, Wis 12, Cha 1)
Mecha Defects: Start Up Time (10 minutes), Noisy

Weapons:						
Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions
PDS (Ranged)*	4d12	A	100m	Unl.	-	-
PDS (Shield)*	9d12	A	Melee	Unl.	-	-
NOTE: *Laser						

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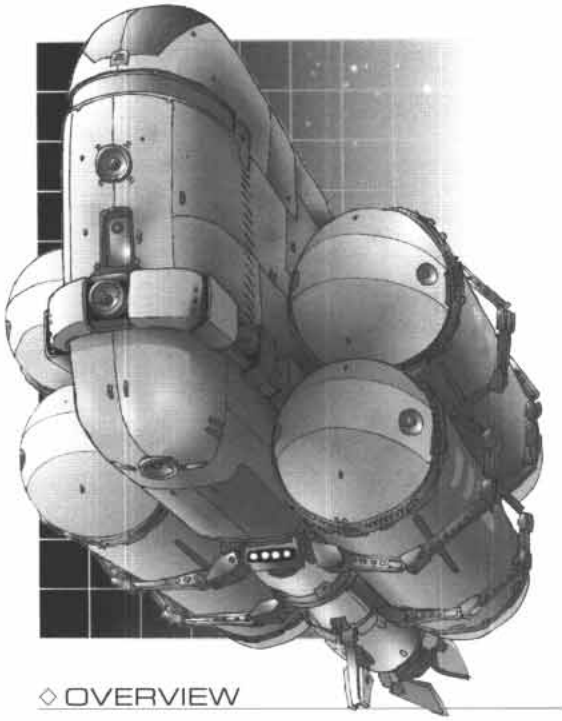
▶ MULE



◇ OVERVIEW

Ships of the Mule-class are a common sight to the citizens of the solar system. Like its slightly larger sibling, the Aquarius, the original design of the Mule was based on the space cargoes of the early twenty-first century, and it has changed very little since then.

The ship is composed of a box of sturdy composite spars to which armor plates and a living module are attached. This give the entire vessel a boxy but rugged appearance. A pair of fusion-driven PCC engine modules are attached to the stern, each capable of high thrust to move the heavy cargo pods lashed to the side of the vessel. A limited reaction mass capacity makes the Mule useful for short to medium range transport only.

◇ CAPABILITIES

The Mule is designed to be used as a modular cargo ship, with special hardpoints mounted on either side of the hull to attach cargo pods. These are usually tanks to carry the liquefied gasses or water used as reaction mass in modern ships. A spacious pressurized bay located between the crew section and the engines is used to house additional cargo, though it most often contains one or two Maneuver pods that help the ship to its moorings and move the cargo tanks about.

DATA

Name:	Mule-class Bulk Freighter
Origin:	Various
Manufacturer:	Various
Type:	Bulk Tanker
Control system:	Bridge
Length:	90 m (105 w/drive fins)
Width:	38 m w/pods
Empty Weight:	700 Tons
Loaded Weight:	Up to 17,000 Tons
Main Powerplant:	2 x 0.2 GW
Secondary Powerplant:	5000 KW
Main Thrusters:	2 x 300 tons
Apogee Motors:	40
Acceleration:	0.8 g (no cargo)
Avionics	Fire Control Radar, Infrared/Ultraviolet, Ladar, Telescope
Fixed Armament:	PDS
Additional Armament:	N/A
Defensive Systems:	Mag Screen
Equipment:	Cargo Pod Hardpoints

Life aboard a Mule is confined and somewhat boring. The cabins are small and the few commons generally have multiple purposes, such as galleys, recreation rooms and meeting offices. They are often crowded when the entire crew is present, so multiple shifts are required.

Private individuals or organizations, such as prospectors and Nomad settlers, often buy Mules because they are relatively inexpensive to produce. The ship's sturdy structure provides a strong backbone to which a large variety of assorted equipment can be attached. Additionally, its reliability is a godsend for groups of settlers moving to the Belt in the tiny, chemically propelled home-build spacecraft that are colloquially referred to as "O'Neill Bubbles." Settlers will often buy a single Mule to serve as the "flying city hall" of their community.

SILCORE STAT BLOCK

Sections: 1 x Main Hull, 2 x Drive Section, 4 x Cargo TankTotal MP: Space 4/8
MAIN HULL
Basic Attributes:Size 26; Movement: Towed by Drive Section, Armor: 50/100/150, Crew: Living 10; Computer 2 (Dumb, Level 2), Deployment Range: 1000 hrs
Perks and Flaws:Accessory: Autopilot, Life Support, Escape Pods; Comm (-2/10 km); Features: Accomodations (500 m3); Hostile Environment Protection: Radiation 4, Vacuum; Sensors (-2/2 km); Reinforced Systems: Backups, Crew
Offensive & Defensive Systems: PDS x 1
DRIVE SECTION
Basic Attributes:Size 15, Movement: Space 14/28, Maneuver: -4, Armor: 20/40/60, Crew: Living 3, Deployment Range: 1000 hrs, Reaction Mass: 3000 BP
Perks and Flaws:Accessory: Life Support; Comm (-2/10 km); Hostile Environment Protection: Radiation 4, Vacuum; Sensors (-2/2 km); Reinforced Systems: Backups, Crew; Negative Feature: Large Sensor Profile 5
CARGO TANK
Basic Attributes:Size 14, Movement: Towed by Drive Section, Armor: 30/60/90, Crew: 0, Deployment Range: 1000 hrs
Perks and Flaws:Features: Cargo Bay (4000 m3); Hostile Environment Protection: Radiation 4, Vacuum
OFFENSIVE & DEFENSIVE SYSTEMS

Name	Arc	ACC	DM	BR	ROF	Perks & Flaws	Ammo
PDS (ranged)	T	0	x5	1	2	AM, HEAT	Unl.
PDS (shield)	FF	+1	x15	M	0	Def, E-Shield, HEAT	Unl.

OGL STAT BLOCK

Type:	Vehicle
Size:	Colossal (Long, 90 m)
Hit Points:	90
Occupancy:	2 operators, 14 crew, 16,000 tons of cargo
Armor Hardness:	15
Speed:	Realistic Space Flight (0.4 g, 500 G-Rounds)
Tactical Speed:	n/a
Initiative:	-8
Maneuver:	-8

Special Abilities:Booster (Space, 0.8g, G-Round 200), Comm (LR Radio, Laser Comm, Microwave; Interplanetary), Ejection Pods, Life Support, Nav Systems (GPS), Rooms: Kitchen, Sickbay, Workshop, Sensors (Optics, Low-Light, Radar, Magnetic; all Global, 2 km)
Exotic Abilities: Limited A.I. (Dex 8, Wis 6, Cha 1)
Mecha Defects:Reduced Endurance (a few weeks), Start Up Time (10 minutes), Very Noisy

Weapons:

Name	Dam.	ROF	RI	Ammo	Qualities	Restrictions
PDS (Ranged)*	3d12	A	60m	Unl.	-	-
PDS (Shield)*	7d12	A	Melee	Unl.	-	Arc of Fire (Front)

NOTE: *Laser

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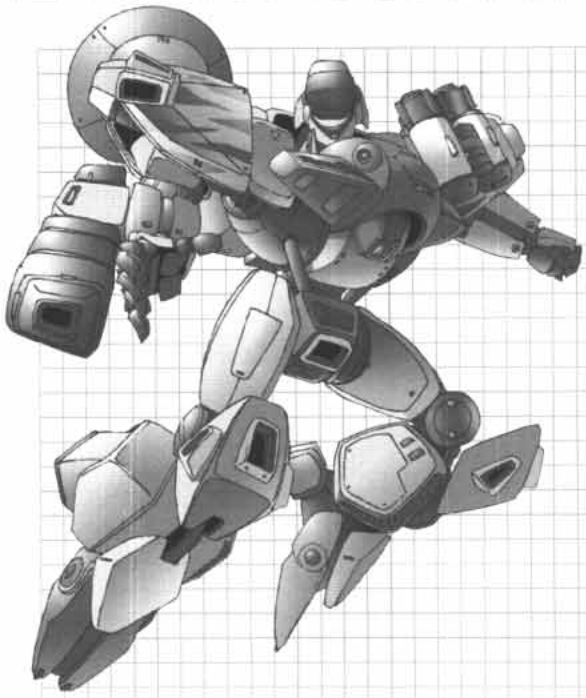
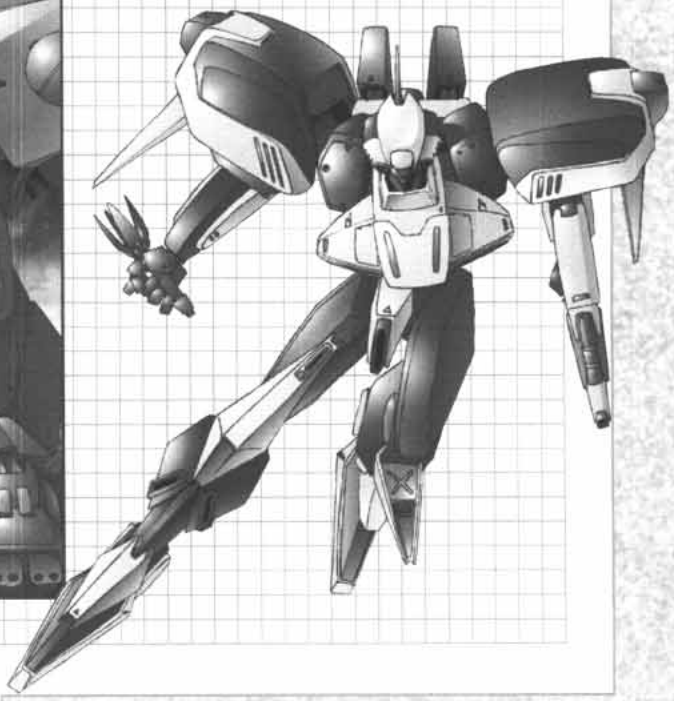


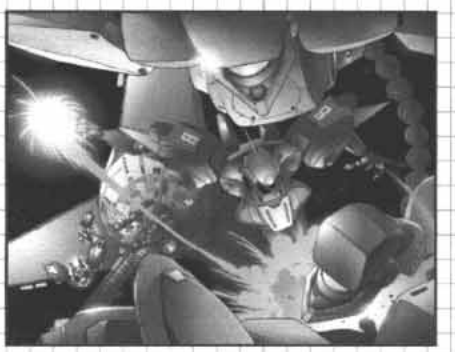
COMBAT VEHICLES

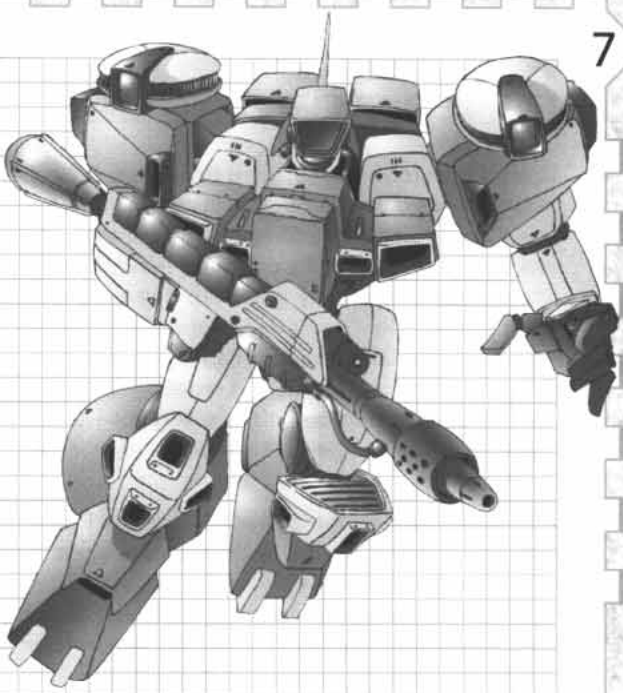
This page shows, clockwise: a Jovian Pathfinder exo-armor, a CEGA force attacking a Venusian ship, a Venusian Ryu exo-armor, and a Jovian Falconer exo-suit (missing the frontal hatch panels).

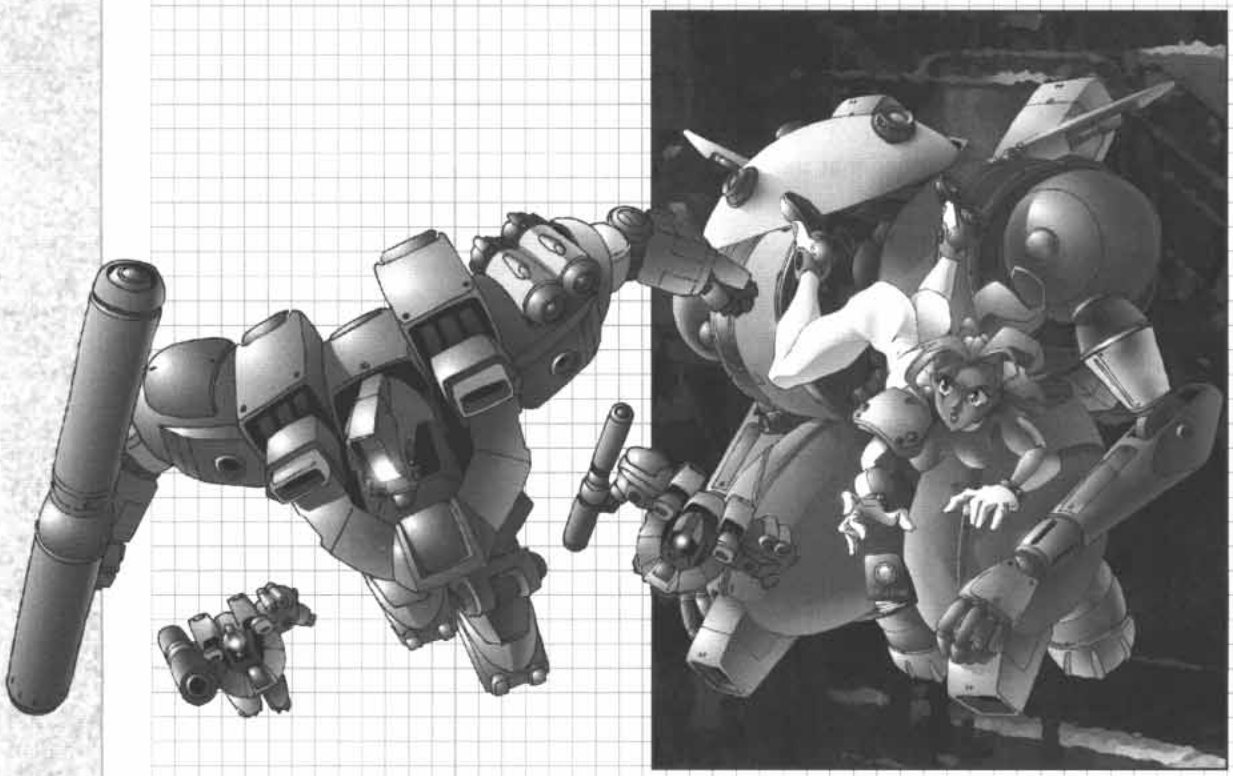


COMBAT VEHICLES

This page shows, counter-clockwise: a CEGA Cerberus exo-armor, a Venusian force locked in combat with Jovian defenders, a flight of CEGA Wyverns, and a CEGA Minotaur exo-suit and its pilot.







▶ ADVENTURE GENERATOR

Anime giant robot stories tend to revolve around a number of similar themes, which means that [[Jovian Chronicles]] adventures can be constructed in a matter of minutes by using the tables below. These tables randomly generate key plot elements, taking the "grunt work" of adventure design out of the Gamemaster's hands. This not only saves the GM valuable time in creating the basic outline of an adventure, it's also a great way to make sure the themes are varied mission after mission.

Of course, turning the generator's results into a coherent [[Jovian Chronicles]] adventure doesn't eliminate the need for a clever Gamemaster. The tables are not intended to take his place. Rather, they supplement the GM's role. The generator's results are meant to be used as guidelines, not as the final word on adventure design. The real work of creativity comes from using the results in exciting and original ways.

The random adventure generator has fourteen steps, each one of which supplies another element. When asked to roll more than one die, add the results together. Simply follow the steps in order and take note of the results generated (or chose the ones you think fit best). The combination of the various random elements can then be put together to construct a coherent plot. At the end of this section is a brief example that shows just how the generator can be used.

▼ DETERMINE THE ADVENTURE'S THEME

A good adventure usually revolves around a single theme that forms its core (having two themes is possible, but it tends to make things unnecessarily complex). Determining that theme is important because it colors the way many subsequent elements are used.

ADVENTURE'S THEME

Roll 1d6 to Determine the Theme, or Pick One	
1	Action/Adventure
2	Exploration
3	Intrigue/Diplomacy
4	Justice/Revenge
5	Mystery
6	Quest

Action/Adventure: This is the default theme for an adventure. Such adventures are characterized by lots of physical action, chase scenes, combat, and overcoming obstacles.

Exploration: This theme focuses on pushing the frontier and discovering new facts about the solar system, maybe even traveling beyond Saturn's orbit.

Intrigue/Diplomacy: This theme involves spying against an enemy, whether that enemy be a villain, a group, or a planetary government.

Justice/Revenge:]This theme focuses on the quest of a character to right a past wrong (whether real or perceived). Frequently, it involves the heroes' attempt to avenge themselves upon the villain(s).

Mystery: This theme is about the solving of a perplexing situation, typically a murder, a disappearance, or other crime.

Quest: The focus is on actively finding a certain item or person; the latter isn't mysteriously missing or particularly justice-oriented, but merely misplaced. It's slower-paced than an action scenario, less angsty than a justice scenario, but has more room for humor, non-combat skills and social roleplaying skills.

▼ DETERMINE THE ADVENTURE'S GOAL

Like the theme, the goal is part of an adventure's core. Whereas the theme pertains to a scenario's ambiance or mood, the goal pertains to its structure. The goal forms the end toward which the adventure is heading, and this element is strongly tied to theme.

ADVENTURE'S GOAL

Roll 2d6 to determine the Goal, or Pick One	
2	Escape
3	Protect NPC(s)
4	Explore
5	Encounter a new villain
6	Stop monstrous plan
7	Win battle
8	Rescue NPC(s)
9	Retrieve an item
10	Protect an item
11	Negotiate a Treaty
12	Resolve Personal Conflict

Encounter a New Villain: The entire purpose of the scenario is to introduce a new, possibly recurring, villain, such as an exo-armor ace pilot.

Escape: The heroes are placed in a deadly situation and must work to free themselves from it. This goal can often be introduced as the follow-up to a previous adventure in which the characters' success places them in danger.

Explore: The heroes must blaze a trail through a little-known region of the solar system. This goal can also be part of a planet-based adventure.

Negotiate a Treaty: The characters are charged with completing a peace plan, a trade deal, or other similar delicate negotiations.

Protect Item: The characters must carry or defend some object of value, to themselves or their patrons, in difficult circumstances. The item can be anything, and need not even be seen or used — it exists solely to provide a motivation for the adventure.

Protect NPC(s): The goal of the scenario is to keep one or more non-player characters (usually defenseless) from harm. The characters act as their bodyguards or chaperones, ensuring that nothing ill befalls them before the conclusion of the scenario.

Rescue NPC(s): The heroes must free one or more non-player characters from captivity, whether natural (trapped in a natural phenomenon) or man-made (held by a villain). Other options include saving someone from an experiment gone awry or even redeeming a fallen hero.

Resolve Personal Conflict: The heroes must deal with the personal problems of a teammate before it starts affecting the entire group.

Retrieve Item: The characters seek out some object of value, to themselves or their patrons, in difficult circumstances. The item can be virtually anything, from a computer chip to a prototype: its exact nature — and its importance to the scenario — is best determined by taking into account the theme of the adventure.

Stop Monstrous Plan: The characters must foil the development of a doomsday weapon or other plot that threatens their home or the stability of the solar system. This includes asteroid drops and most Edicts violations.

Win Battle: The heroes must act to turn the tide of a battle at a crucial moment. Bear in mind that if the characters win an important enough battle, this victory will have consequences for the local sector.

▶ DETERMINE PLOT STRUCTURE

Another essential element of an adventure is the plot structure. This element sets up how the scenario will proceed. That is, the plot structure shows how the scenes of the adventure relate to one another and how the characters move through them.

ADVENTURE'S THEME

Roll 1d6 to determine Plot Structure, or Pick One	
1	Accumulation Of Elements
2	Major Event
3	Physical Progression
4	Race Against Time
5	Series Of Villains
6	Single Item Quest

Accumulation of Elements: The plot centers around the search for multiple "items," each one of which points to the next, leading to the adventure's conclusion. The items in question need not be physical objects; they can be clues or people that add to the sum of the characters' knowledge.

Major Event: The entire plot is structured around a single event, such as an important treaty or key battle, and does not advance. In a way, an event-based scenario is really a single large scene with many parts, each one of which demands the characters' attention.

A

Physical Progression: The plot advances as the characters journey from one locale to the next. Like the Accumulation of Elements above, the movement from one locale to the next is the impetus for the characters' increase in knowledge, leading them on to the scenario's conclusion.

Race against Time: This plot assumes that there is an event (whether natural or artificial) that must be stopped. The characters must act quickly to do so, before the event takes place — with disastrous results.

Series of Villains: The plot advances as the characters defeat a group of villains, each one more powerful than the last. Naturally, the villains are related to one another in some fashion, usually as part of the same organization or hierarchy.

Single Item Quest: The plot centers on an attempt to acquire a single item, whether it be a person, object, or information. Unlike the Accumulation of Elements, this plot structure focuses heavily on the item. It is important in itself, not just as a means to get to the next step.

▼ DETERMINE THE CLIMAX

Just as important as the plot structure is its climax. It should be noted that a climax doesn't need to involve combat — it can also involve saving a life or engaging in a battle of wits or willpower.

THE CLIMAX

Roll 1d6 to determine the Climax, or Pick One	
1	Battle
2	Chase
3	Headquarters Duel
4	Prevented Action
5	Scattered Skirmishes
6	Unexpected Reversal

Battle: The characters must fight a massed battle against their enemies and their troops to achieve their goal. Often, the battle is heavily mismatched and involves the characters seeking out aid from unexpected sources (local Nomad clans, etc.).

Chase: The climax involves a vehicular or spacecraft chase, in which the characters must contend with high speeds as well as other hazards. Such a climax usually pits the characters directly against the villains in a test of their relevant skills.

Headquarters Duel: The characters must defeat the villain in his own base or ship. The Headquarters Battle should culminate in the characters facing off with the villain and his closest — and most powerful — henchmen.

Prevented Action: The characters must stop something from occurring to achieve their goal. This could involve stopping the villain from activating his doomsday weapon or dropping an asteroid on a defenseless nation.

Scattered Skirmishes: The characters must fight several small fights to achieve their goal. This differs from Battle above in that these fights are usually one on one affairs in which the characters face off against the villain's henchmen before reaching the villain himself.

Unexpected Reversal: A natural disaster or other freak occurrence brings about the conclusion of the scenario. Alternately, the villain's plans backfire on him, bringing his schemes to an unfortunate end. Examples include henchmen turning on their masters (often for love).

▼ DETERMINE THE STORY HOOK

The story hook is the element that initiates the adventure, either directly or indirectly. It's the trigger that sets everything into motion.

THE STORY HOOK

Roll 2d6 to determine Story Hook, or Pick One	
2	Dying Delivery
3	Falsely Accused
4-5	Report or Rumor
6-7	Patron
8	Old Enemy
9	Grim Necessity
10	Mystery Man/Woman
11	Family
12	Pressing Buttons

Dying Delivery: The last words of a dying person provide the heroes with the impetus to begin the adventure. The dying person need not be known to the characters, but it often adds emotional impact if the person is friend, colleague, or relative.

Falsely Accused: The reputation of one or more of the heroes is tarnished and they must act to defend it. This story hook often involves the former heroes being treated as pariahs by those they know — at least until they can clear their names.

Grim Necessity: The characters must begin the adventure, because they have no choice (an antidote must be found to save a life, they're prisoners, etc.).

Mystery Man/Woman: An unknown individual employs the characters to undertake a mission for him or her. The nature of the mission is often equally mysterious, leading to suspicion and skepticism regarding the employer's true intent.

Old Enemy: The reappearance of an old villain (or someone impersonating him) calls the characters to action. This hook only works if the characters have already tangled with the villain before and uses their history as a way to pull them into the scenario.

Family: A relative of the characters calls upon them for assistance, or are in trouble themselves. Like the Old Enemy above, this hook works best if the characters have dealt with the relative before.

Patron: The characters are asked or ordered by an individual or group to perform a particular task. This hook is very broad and encompasses patrons as disparate as a planetary government or a noted scientist.

Pressing Buttons: This is a catchall category that describes any hook that uses a character's motivations and interests to draw him into the scenario. Using Pressing Buttons is also an excellent way to show that having a well-detailed background makes for great adventures.

[[Report or Rumor:]] The characters hear a story of some sort that leads them into the adventure. This story can be an old legend, a frontier report, an intelligence briefing or even an actual assignment.

▼ DETERMINE GENERAL SETTING

All adventures take place somewhere. This step determines the general location in which the scenario is set.

GENERAL SETTING

Roll 2d6 to determine the General Setting, or Pick One	
2	Homebase
3	At Sea
4	Rugged Terrain
5-6	Cosmopolitan City
7	In Space
8	In a Space Outpost
9	Aboard a Spaceship
10	Underground
11	Undersea
12	Exotic Land

Aboard a Spaceship: Most of the adventure occurs in a large spacecraft of some sort, whether a cargo ship or a shuttle. Like most space-based locations, it can be entirely cut off from the outside, making it easy to focus the characters on the plot.

At Sea: Extensive oceans cover Earth, humanity's homeworld and the home of CEGA, so adventures occasionally happen on the waves. This locale refers primarily to shipboard adventures, although other options, like offshore rigs, are possible as well.

Cosmopolitan City: This locale refers to any large city with a diverse population. The actual layout will depend on the locale: colony cylinder, space station, Venusian arcology, etc.

Exotic Land: This locale covers any foreign planet or location, with an emphasis on those considered somehow "alien" to the characters (a research station on an ice asteroid in the Oort cloud beyond the orbit of Pluto, for example).

Homebase: All heroes have a base of operations (a spaceship, for example). This locale can be used to lend a sense of urgency to an adventure. After all, there is nothing worse than having the place you call home be menaced by the bad guys.

In Space: This locale covers the surface of asteroids, near orbits, and most spacecraft.

In a Space Outpost: This locale refers to any small self-contained space habitat, whether an orbital work shack or a small station.

Rugged Terrain: The locale is an area of rugged terrain, such as a desert, a canyon, or a mountain range, on any planet. Whatever the terrain, it is inhospitable and poses many risks to the characters.

Underground: This describes any locale located beneath the surface of a planet or asteroid. Cave systems are the most common, but other options, like the artificial labyrinths of the Nomads' zocalos, are also possible.

Undersea: This locale refers to any that is beneath the surface of the water, including the frozen seas of Europa and Titan. Possibilities include secret underwater stations or exploration submarines.

▼ DETERMINE SPECIFIC SETTING(S)

Most adventures have several scenes, each of which takes place in its own locale. In general, adventures benefit from changes of pace to highlight different elements of the plot. Therefore, roll 2d6 several times (about three per adventure) to determine these settings.

SPECIFIC SETTING(S)

Roll 2d6 to determine Specific Setting, or Pick One (up to three times)	
2	Body of Water
3	Famous Locale
4	Desolation
5	Strongman's Fortress
6	Cosmopolitan Area
7	Military Base
8	Oppressed Land
9	Residential Area
10	Social Gathering Place
11	Infrastructure
12	Mansion

Body of Water: This locale is an ocean, a lake, or some other body of water. Rivers and waterfalls are also included, as are artificial pools and reservoirs.

Cosmopolitan Area: Any place where lots of people converge together, whether a plaza, the main commons of a ship, or a zocalo marketplace. It's a public place, where it's easy to blend in, unlike a residential area, where strangers stick out like sore thumbs.

Desolation: Empty interplanetary space, desert, etc. No passers-by or inhabitants, easy to hide and get lost>>

Famous Locale: This refers to any well-known or recognizable place, such as a planetary capital, a specific space colony or a landmark (Mount Olympus on Mars, for example).

Infrastructure: Sewers, sanitation plants, maintenance buildings, service tunnels, junkyards, Venusian farms, etc. Places where people usually don't go because they smell or look bad. Trespassing is illegal, but entry isn't too hard to gain. Usually, some function vital to the basic livelihood of the local populace can be affected in such a place.

Mansion: This locale is the opulent home of wealthy individuals. It is a status symbol for those who can afford them and often the site of extravagant parties and other more dubious activities. It can also be an office or any place that speaks of wealth.

Military Base: This covers any locale controlled by a military organization. Thus, it includes places as diverse as forts, camps, rebel strongholds and spaceport bases. Most military locales are well guarded and protected, but their strength varies greatly with the force that holds them.

Oppressed Land: This locale refers to any place suffering under the iron boot of tyranny. The tyranny can be a homegrown dictator or a foreign oppressor. This definition can be stretched to include the Martian Federation and CEGA, and can also cover slums and low-rent areas, which are arguably under the thumb of overbearing landowners.

Residential Area: Neighborhoods, apartment complexes, hotels, etc. Lots of families and children, usually places where action is rare and unknown trespassers viewed with some suspicion. There's seldom anything of military value, but one can expect to find food, quality-of-life goods, and easy hostages (if you're into that kind of thing).

Social Gathering Place: Whether this is a sleazy dive, a glistening spa or an army official ball, it is an excellent place to meet contacts and engage the enemy in non-violent threats and repartee.

Strongman's Fortress: This locale is the headquarters of a powerful individual, whether he be the main villain of the adventure or not. The headquarters is almost always well guarded and protected by hordes of loyal troops.

▼DETERMINE MAIN VILLAIN

Roleplaying adventures are very character-driven and few characters are as important as the main villain. This step determines the general nature of the main villain. A villain can have more than one of these traits, if desired.

MAIN VILLAIN

Roll 2d6 to determine Main Villain, or Pick One	
2	Agent Provocateur
3	Advance Agent
4	Avenger
5	Corruptor
6	Conqueror
7	Organizer
8	Relative
9	Ex-Lover
10	Lovable Rogue
11	Sufferer
12	Fanatic

Advance Agent: This villain is a scout for another power, trying to determine whether a particular locale is ripe for take-over by his superiors.

Agent Provocateur: The villain is in the employ of another power and has been sent to stir up trouble in preparation for an invasion or other attack. Alternately, the Agent Provocateur may be sent to bring about an uprising or rebellion.

Avenger: The villain acts to settle an old score or right a perceived wrong. He thus acts out of the belief that a person, group or nation has somehow slighted him.

Conqueror: The villain seeks to take over a location by force. If he's not a military leader, he must possess some means to achieve his ends, such as high technology (a squadron of exo-armors, perhaps?) or allies within the nation he intends to conquer.

Corruptor: The villain acts to undermine people or institutions for his own ends. Often a hidden enemy inside the group or organization he wishes to corrupt, he may be a trusted advisor or underling to a more powerful figure.

Ex-Lover: The villain was once in love with one of the heroes. If desired, you may reroll on this table to provide the ex-lover with another motivation.

Fanatic: The villain is a firm believer in a cause and acts accordingly. This cause can be political, religious or ideological. Whatever it is, he believes strongly in it and acts because he believes his schemes will further that cause.

Lovable Rogue: The villain is not truly evil. Rather, he is venal and acts in accordance with his central vice. Nevertheless, he possesses several endearing qualities, making the rogue a suitable villain for more lighthearted adventures.

Organizer: Like a spider in its web, the villain sits at the center of network of lesser villains. In general, he rarely acts directly, preferring to use his minions to achieve his goals. Defeating an Organizer will require much work, as he tries to insulate himself.

Relative: The villain is a close relative of one of the heroes (father/mother, brother/sister, etc.). If desired, you may reroll on this table to provide the relative with another motivation.

Sufferer: The villain is afflicted (either in reality or in his mind) with some malady or condition that compels him to act. This could be anything from a fatal disease to insanity, even angst at the loss of a loved one (a common anime plot).

▼DETERMINE MINOR VILLAIN

Many villains have one or two main henchmen, lesser villains who act as his eyes and hands in the field. Roll 2d6 once or twice to determine the nature of these minor villains.

MINOR VILLAIN

Roll 2d6 to determine Minor Villain, or Pick One (up to twice)	
2	Reluctant Villain
3	Corrupt Hero
4	Advisor
5	Operative
6	Ace
7-8	Muscleman
9	Honorable Villain
10	Soldier
11	Inquisitor
12	Coward

Ace: The villain is an ace in his chosen profession, generally a pilot or soldier of some kind. He is often arrogant and very proud of his abilities, and he will obsessively try to confront the heroes again if defeated or even subject to a draw.

Advisor: The minor villain is an advisor to the major villain. His advice is pragmatic and considers only the best interests of the villain and his goals. The Advisor is less concerned with self-interest and is often a powerful figure in his own right.

Corrupt Hero: The villain is a former hero gone bad. This villain may be returned to goodness with the appropriate action on the part of the characters, but doing so should come only as the result of great effort.

Coward: The villain is fundamentally cowardly and never confronts the heroes directly. Such a villain may be comical in nature or he may simply be physically weak and fear confrontation.

Honorable Warrior: The villain is an expert in his chosen field and follows the main villain because it suits him or his goals. The Honorable Warrior is dashing and has a strong sense of morality, and may even be persuaded to change sides.

Inquisitor: The villain uses violence and terror to obtain information. His primary interest is in gaining this information so that he may use it to further the main villain's plans.

Muscleman: The villain is essentially a thug. He is very powerful, either through physical might, training or equipment, but lacking when it comes to planning or strategy. His usual method of attack is direct confrontation.

Operative: The villain is a trained killer. Often he possesses unique and rare skills, possibly as a result of training in a faraway land or technological augmentations.

Reluctant Villain: The minor villain dislikes the aims and goals of the main villain, but considers the current events as required or desirable. The end justifies the means.

Soldier: The villain is a trained and relentless warrior. Unlike the Muscleman, he uses guile and planning to achieve his ends. He also is relentless in his pursuit of the characters and will not stop until he or the heroes have been defeated.

▼ DETERMINE SIGNIFICANT NPCS

Adventures are not just populated with villains. Roll 2d6 (no more than three per adventure) to determine other significant NPCs.

SIGNIFICANT NPCS

Roll 2d6 to determine Significant NPCs, or Pick One (up to three times)	
2	Superior
3	Inquisitive Official
4-5	Bandits/Thugs/Pirates
6	Belligerent Soldier
7-8	Contact
9	Thief
10	Friend at a Wrong
11	Seducer
12	Clueless Accomplice

Bandits/Thugs/Pirates: The NPCs are low-powered goons. Most likely, they are not (or peripherally) connected with the larger plot and provide an opportunity for a little mayhem.

Belligerent Soldier: The NPC is a surly warrior who takes a dislike to the characters. He may use his position to harass the characters, even to the point of violence.

Clueless Accomplice: Someone who's helping the bad guys without knowing it.

Contact: The NPC is a source of information, parts, ammo and other vital supplies.

Friend at a Wrong Time: The NPC is an acquaintance of the heroes who has a knack for showing up at the most inopportune of times. He distracts the characters from their mission and may be a source of danger to them.

Inquisitive Official: The NPC is a nosy government officer who takes too keen an interest in the characters' actions. In doing so, he may expose the characters to danger.

Seducer: The NPC is a person intent on swaying the heroes to his point of view, either through physical wiles or other methods. In most cases, the Seducer is not in the employ of the villain.

Superior: A patron, boss or manager who may restrict the players' activities or grant increased access to information or equipment.

Thief: The NPC is skilled in theft, whether of the characters' belongings or those of others. He may steal something of value from the characters, precipitating a chase to recover the item.

▼DETERMINE DANGERS/HAZARDS

Many adventures involve a series of dangers or hazards that the heroes must escape. Roll 1d6 (no more than three times per adventure) to determine the general type. Then, roll 1d6 again for each danger to determine its specific type.

Note that while each danger is given in a generic planet-bound format, it can be adapted to any situation. For example, Asphyxiation can represent a flooded room, a blown airlock, an exhausted life support pack, etc.

DANGERS/HAZARDS

Roll 1d6 to determine General Type, or Pick One (up to three times)	
1-2	Natural
3-4	Mechanical
5-6	Technical

Natural Danger

These are dangers that are not created by humanity, and that affect environments, not merely individuals.

NATURAL DANGER

Roll 1d6 to determine Specific Type, or Pick One:	
1	Avalanche
2	Storm
3	Earthquake
4	Flood
5	Noxious Gas
6	Flora and Fauna

Mechanical Danger

Dangers either from basic technologies or low-intensity natural phenomena. Rockslides go in the previous category; a single falling rock goes in this one. Both are dramatic, but for different reasons.

MECHANICAL DANGER

Roll 1d6 to determine Specific Type, or Pick One	
1	Fall
2	Toxin
3	Isolation
4	Crush
5	Asphyxiation
6	Privation

Technical Danger

Dangers specific to human artifacts and technology of the Industrial Age and beyond.

Asphyxiation: Danger from the inability to breathe or a lack of oxygen. This can represent a flooded room, a blown airlock, an exhausted life support pack, etc.

TECHNICAL DANGER

Roll 1d6 to determine Specific Type, or Pick One	
1	Electricity
2	Radiation
3	Temperature Variance
4	Redirection
5	Vibration
6	Exotic

Avalanche: This represents a rockslide, or falling trees, or something involving gravity and impact.

Crush: A rapidly collapsing structure that must be stopped or evacuated will crush the characters unless they find a means of escape. This includes falling objects or moving objects with lots of mass and momentum.

Earthquake: An earthquake or volcano, or anything involving geological disturbances, begins, threatening the characters with collapsing structures and falling debris.

Electricity: This excludes lightning, which is a random, environmental thing. In this category, the danger comes from tampering or working with human-bound electricity.

Exotic: This is a catchall category that refers to things like mutant strains of bacteria, as well as devices using other forms of energy.

Fall: The characters are endangered by a drop-off or a great height. This can also be taken to include any kind of excessively fast acceleration or deceleration.

Fauna and Flora: The characters encounter difficulties from animals or plants. This covers guard dogs all the way to genetically-engineered mobile vines.

Flood: This also includes quicksand, or swamps, or methane seas, or anything involving large volumes of liquid or dust as a danger.

Isolation: The characters are cut off by human intervention (i.e. prison), jammed doors, impenetrable forest, huge deserts, etc.

Noxious Gas: Some sort of poisonous gas (either natural or a leak from a spacecraft system) seeps into the characters' location and threatens to overwhelm them. This can also include radiation, or something involving any kind of natural NBC threat.

Privation: Danger from lack of food, potable water, clothing, etc. This isn't the same as Temperature Variance, since in this case, temperatures are perfectly normal; it's the character(s) who's underdressed and therefore exposed to damage.

Radiation: The characters must contend with high levels of radiation, either from a weapon, isotopes, exposed plasma core, etc. Not quite the same as a solar flare, which would be a natural danger.

Redirection: The location where the characters are suddenly changes and moves them elsewhere. Things like collapsing platforms, elevators and autofac conveyors fit this category.

Temperature Variance: This is actually Natural, Mechanical and Technical, depending on the source and area of effect. Basically, it's either too hot or too cold for comfort.

Toxins: The characters are endangered by a poison or disease that is not tied to a specific environment. Poisoned rations or contagious sickness are good examples.

Vibration: The characters must contend with a device or machine that has vibrations as its primary form of damage.

Storm: The characters are caught in some sort of inclement weather that threatens them and impedes their progress. Examples include heavy rain, hurricanes, snowstorms, tornadoes, high winds, sandstorms, or anything involving atmospheric disturbances.

Vibration: Earthquakes are natural. This category, on the other hand, covers sonic weapons, unstable floors or bridges, and malfunctioning engines.

▼ DETERMINE CHASE

Many adventure features a major chase or two. Roll 2d6 no more than twice per adventure to determine the nature of the chase.

CHASE

Roll 2d6 to determine Chase Type, or Pick One (up to twice)	
2	Naval
3	Endurance
4-5	Foot Race
6-7	Spacecraft
8-9	Walker Vehicle
10	Group Vehicle
11	Aerial Vehicle
12	Special Terrain (snow/ice, mountainside, etc.)

Aerial Vehicle: The chase involves a flying device of some kind.

Endurance: This chase involves the characters performing some sort of strenuous physical activity, such as swimming or climbing. The success of the chase depends heavily on the characters' athletic abilities.

Foot race: This is a simple chase on foot, although it can be complicated by being through crowded streets, an abandoned warehouse, or on catwalks within an arcology.

Group Vehicle: The chase involves a vehicle where the entire group can fit at once, such as a car. More to the point, this category is specific for vehicles whose successful operation depends on the entire group, not just one pilot.

Naval Vehicle: The chase involves a waterborne craft of some sort. Most likely, it is a surface craft, although a submarine is possible as well.

Spacecraft: The chase involves a large spacecraft, such as a fighter or a capital ship.

Special Terrain: The chase takes place in an unusual environment, like a snowfield or a mountain

road. Roll again to determine the type of vehicle involved, ignoring any subsequent results of Special Terrain.

Walker Vehicle: The chase involves an exo-vehicle, whether a suit or armor.

▼ETHICAL DILEMMA

Some adventures involve an ethical choice at some point, which the heroes must resolve before continuing on their quest. Like the Narrative Twist, further on, not all adventures need to include a dilemma.

ETHICAL DILEMMA

Roll 1d6 to determine the Moral Quandary	
1.	Ally
2.	Relative
3.	Honor
4.	Lesser of two evils
5.	Rescue a friend/colleague
6.	Save the villain

Ally: The characters must decide whether to save an ally at the cost of their mission. This choice is made even more poignant when the ally is someone especially helpless, like an old man or a child.

Relative: As Ally, but with a relative involved instead.

Honor: The characters must decide whether achieving their goal in a dubious way is acceptable. Such a quandary forces the hero to confront whether he is truly any different from the villains he faces.

Lesser of Two Evils: The characters must choose between two difficult options. One example is deciding which of two friends will die because there isn't enough air for both. These situations have an "escape route" that allows the characters to achieve both ends — if they can recognize it.

Rescue a Friend/Colleague: An innocent bystander is threatened but saving him may jeopardize the characters' mission.

Save the Villain: The characters must decide whether they would rather fail in their mission or save the villain to achieve their goal.

▼DETERMINE NARRATIVE TWIST

A lot of good adventures have narrative twists that surprise everyone involved. While not all of them require a surprise twist (doing this will tend to kill the surprise over time), these can be dropped almost anywhere.

NARRATIVE TWIST

Roll 1d6 to determine the narrative twist	
1	Hero must work with villain
2	Mission is a ruse
3	NPC turns traitor
4	Outcome Reversal
5	Villain accompanies heroes
6	Villain is related to hero

Hero must work with villain: The heroes discover that they can only achieve their goal by working with the villain. In some cases, this means convincing the villain to abandon his cause. In others, the characters discover that the reputed villain is in fact not their true enemy. In this case, they must team up with the villain against an even greater threat to them all.

Mission is a ruse: The characters learn that their assumed mission is in fact a cover for something greater. This can be benevolent, such as when a secret government organization uses the characters to distract the villains from the real plan, or malevolent, such as when a master criminal uses the characters as pawns in his own plan.

NPC turns traitor: Someone, probably an ally, shows his true colors and betrays the characters to the main villain.

Outcome Reversal: The characters complete their mission (or are at the point of doing so) and then find out that the point of the mission was something other than they thought.

Villain accompanies the heroes: For some reason, the villain must travel with the characters. This differs from the first entry in that the villain may not be aiding the characters. He is merely traveling with them, probably aboard the same ship (if a commercial vessel).

Villain is related to the hero: The characters discover the villain is actually a friend or relative. He may be a hero's father or brother or something of that sort. Often, the villain is someone presumed dead.

A

▼RANDOM ADVENTURE EXAMPLE

Now that the generator has been laid, let us see how it works in practice. The following example is intended to show GMs just how useful the random generator can be — especially when you need to come up with a **Jovian Chronicles** scenario on short notice.

ADVENTURE EXAMPLE

1.	Determine the theme. Rolled a 2, Exploration.
2.	Determine the goal. Rolled an 11, Negotiate a Treaty.
3.	Plot structure. Rolled a 5, Series of Villains.
4.	Climax. Rolled a 1, Battle.
5.	Story Hook. Rolled an 8, Old Enemy.
6.	General Setting. Rolled a 7, Space.
7.	Specific Settings. Rolled an 11 — Infrastructure, 12 — Mansion, and 3 — Famous Locale.
8.	Main Villain. Rolled a 6, Conqueror.
9.	Minor Villain. Rolled 11, Inquisitor and 3, Corrupt Hero.
10.	Significant NPCs. Rolled and 11 — Seducer, a nd 12 — Clueless Accomplice
11.	Dangers/Hazards. Rolled one of each, in this case Noxious Gas, Toxin and Exotic.
12.	Chase. Rolled a 6, Spacecraft.
13.	Ethical Dilemma. Rolled a 6, Save the Villain.
14.	Narrative Twist. Rolled a 1, Hero must Work with Villain.

Results can (and should) be discarded if they don't fit the developing story arc. Regardless of what gets left out, the Gamemaster now has a good foundation to start adventure building.

A group of Nomad scouts has ventured out at the edge of the distant Oort Cloud to investigate an incoming comet that might be easily redirected to the Belt, where it will be mined for its precious water and volatiles. The characters have been sent to safeguard an evaluator that will deal exploitation rights. During the long trip out, however, they keep being harassed by mysterious attackers; unknown to the characters, the evaluator's personal secretary is broadcasting their position by sending reports home. The situation is further complicated by the secretary's flirtatious nature: what will her new beau think when the truth is discovered?

When the characters get to the comet outpost, however, the place is deserted. All the scouts have fallen prey to primitive bacterias that were locked away in the ice and floated away as gaseous spores when samples were unfrozen. Before the scouts died, however, they had already placed the engines and triggered them — and now the comet is on its way to the inner system, with no one aware of the danger it represents! As the heroes try to figure out what to do, the villain arrives: he's the character's old nemesis, with his famous customized mobile baseship. His forces are the ones that had been attacking the characters to get them out of the way, since he intents to hijack the comet to fund his plans.

Unaware of the biological disaster, he orders his force to redirect the comet and get rid of the witnesses. As the two sides battle for control, the characters must convince the villain of the greater danger. If they do, he'll team up with them to send the comet out to deep space.

There are several results that are missing from the scenario, either because they did not fit or because their inclusion would make the plot too complicated. There are also many elements that have little to do with the random rolls but are included to make the story flow better. It should be kept in mind that this system is only meant to produce guidelines. The GM's own ideas are far more important what the dice tell him to do.

A

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SILCORE CHARACTER SHEET

A

SKILLS:

Name	LVL	Cpx	Name	LVL	Cpx
~~CHARACT R SHEETS~~					

PERSONAL DATA:

Name:
Profession:
Nationality:
Year of Campaign:

WEAPONS:

Name	ACC	DAM	RANGE	AMMO	ROF

PERKS/FLAWS:

EQUIPMENT:

PHYSICAL STATUS:

INJURY
Flesh Wnd.
Deep Wnd.

UD AP	AD AP	SS
	-1	
-1	-2	
	-3	
-2	-4	
	-5	
-3	-6	
	-7	
-4	-8	
	-9	
-5	-10	
Instant Death		

ATTRIBUTES:

Agi:	App:
Bld:	Cre:
Fit:	Inf:
Kno:	Per:
Psy:	Wil:

SECONDARY TRAITS:

Str:	Hea:
Sta:	Ud:
Ad:	

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OGL CHARACTER SHEET

A

PERSONAL DATA

Name:
Race:
Occupation:
XP:
Vitality:
Wounds:
Defense:
Initiative:
Action Dice:
Base Speed:
Inspiration:
Education:

ABILITY

ABILITY	SCORE	MODIFIER
STR		
DEX		
CON		
INT		
CHA		

ATTACKS

Unarmed:
Melee:
Ranged:

SAVES

Fortune:
Reflex:
Will:

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SKILLS

Name	Bonus	Total	Name	Bonus	Total

WEAPON

Name			Bonus	Dam	Error	Threat
Range	Weight	Type	Size	Special Properties		

WEAPON

Name			Bonus	Dam	Error	Threat
Range	Weight	Type	Size	Special Properties		

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GLOSSARY

Aerobraking: a maneuver using friction with an atmosphere to decelerate a spacecraft without using reaction mass.

Aeroshell: a heat shield used to protect a spacecraft during aerobraking or reentry.

Agora: the seat of the Jovian Confederacy's government. It is located in the Jovian capital of Elysée.

Airlock: a sealed chamber that can be independently pressurized, allowing movement to and from the vacuum of space.

Albedo: the reflecting power of a non-luminous body on a decimal scale of 0 to 1. A perfect reflector would have an albedo of 1, reflecting 100% of the light aimed at it.

Anchorage: space station built into an asteroid. Nomad term.

Aperture: the diameter of the opening through which light passes in an optical instrument.

Aphelion: the farthest point that a body reaches in its orbit around the Sun.

Apoapsis: the farthest point that a body reaches on an orbit around any other body; the "generic" root of "aphelion" and "apogee."

Apogee: the highest point that a body reaches in its orbit around a planet.

Asteroid: small celestial body composed of metal, rock, ice, or any combination of the above.

Asteroid Belt: the region of space extending from approximately 2.2 to 3.3 AU from the Sun. Most of the asteroids orbit within this zone.

Astronomical Unit (AU): a unit of measure based on the distance from the Earth to the Sun. It is equal to 1,49 x 10^8 km and is commonly used for interplanetary flight.

Attitude: the orientation of a spacecraft to a given frame of reference.

Axis: an imaginary line around which a body rotates.

Barbecue Mode: a slow rolling maneuver that improves heat distribution on the skin of a spacecraft.

Beam Cannon: see Particle Cannon.

Belt, the: common name for the Asteroid Belt.

Bulkhead: a structural wall inside a spacecraft.

C Asteroid: carbonaceous asteroid, rich in organic matter, water-soluble salts, magnetite and clay minerals. They dominate the outer asteroid belt.

Caldera: a type of volcanic crater caused by the collapse of the ground after a powerful eruption; common on Venus and Io.

Central Earth Government and Administration: see CEGA.

CEGA: acronym for Central Earth Government and Administration. It is the ruling body that controls much of the Earth system.

Colony Cylinder: a huge, self-contained space station between 25 and 40 km in length, slowly rotating to generate one gee of gravity on the inside surface.

Cryogenic: very cold temperatures.

Cyclers: space stations or converted asteroids placed on a solar orbit that takes them close to two planets every few years. Used as cheap but slow spacecraft with no need for fuel.

Deck: the floor level of a room, generally oriented toward the engines.

Delta V: change in the velocity of an object.

Deorbit Burn: a rocket thrust which reduces the orbital velocity of a body to lower its altitude, generally in preparation for reentry or landing.

Departure Velocity: the relative velocity of a spacecraft once it leaves a celestial body's gravitational field. Also known as hyperbolic velocity.

Deployment: releasing a payload or daughter craft to space.

Doppler Effect: the apparent change in the wavelength of light according to the motion of the body emitting it, in relation to the observer's position. It is used to calculate the velocity of a moving object.

Eccentricity: the measure of how well an orbit compares to a perfect circle; an eccentricity of 0 is a perfect circle, 1 is a parabolic orbit and greater than 1 is a hyperbolic orbit. Most planets have very low eccentricities, with Mercury and Pluto being the most extreme examples.

Ecliptic: the imaginary plane on which much of the solar system rotates; it is defined by the orbit of the Earth around the Sun.

ECM: acronym for Electronic Counter Measures,

A

a set of devices intended to confuse enemy sensors and communications.

Elysée: the capital of the Jovian Confederation. It's a giant colony cylinder of the closed "Vivarium" type, in a very high orbit around Jupiter.

Escape Velocity: the minimum velocity an object must reach to escape from the surface of a planetary body.

ESWAT: acronym for Extra Special Weapons And Tactics, groups of highly trained policemen equipped with exo-suits to face down heavily armed criminals.

EVA: acronym for extra-vehicular activity, more commonly known as a space walk; going outside a craft in a space suit (called "going EVA").

Exo-Armors: large personal armors, standing around fifteen meters high and piloted from a cockpit usually located in their chest area.

Exo-Suits: also known as powered armors, or powered suits, they are smaller counterparts of the exo-armors. They are worn by their pilot and generally stand between two and three meters tall.

Floaters: secretive, giant "gas bag" creatures living in Jupiter's atmosphere. They are about as intelligent as a whale and can communicate with one another through electronic impulses.

Flux Tube: charged particles flowing from two space bodies along the larger one's magnetic field lines. A good example is the one linking the poles of Io and Jupiter.

Gee: a measure of acceleration, the gee (also noted as simply g) is equal to the pull exerted by the Earth at sea level. It is equal to 9.8 m/s^2, though the rounded value of 10 m/s^2 is used for most calculations.

Geostationary Orbit: a high orbit above a planet or other celestial body that matches the body's rotation rate. Anything following the orbit will thus remain constantly above the same spot. Generally used for communication or surveillance satellites.

Gravity Wheel: a large wheel-like structure that rotates to provide simulated gravity on its internal surface, which serves as the "floor."

Gravity Whip: a maneuver whereas a spacecraft uses a space body's momentum to boost or reduce its velocity without expending reaction mass.

Heliocentric: an orbit centered about the Sun.

Hohmann Transfer Orbit: an elliptical orbit where one end is tangent to the orbit of the point of departure and the other tangent to the orbit of the point of arrival. It is the lowest energy path from one point to another.

Hydrazine: a nitrogen-hydrogen compound that gives off energy when decomposing; it is used in very small (and thus simple) rocket motors.

Hypergolic Propellants: chemicals that ignite spontaneously on contact with each other; generally used in small maneuver engines or in weaponry (like the Wyvern's bazooka).

Hypersonic: a speed greater than five times the speed of sound.

Igloo: a temporary pressurized chamber, usually a shelter (slang term).

IGS: acronym for Interplanetary Geographic Society, a scientific group that studies the solar system and its inhabitants.

Infrared: electromagnetic radiation with a wavelength longer than visible red light.

Integration: assembling payloads or components of a spacecraft in a desired configuration.

JAF: acronym for Jovian Armed Forces, the combined army/navy of the Jovian Confederation.

JAW: acronym for Jovian Armor Works, principal exo-armor and weapon manufacturer in the Confederation.

Kinetic Kill Cannons: a class of weapons cause damage by kinetic energy (movement). See Massdriver, Railgun.

KREEP: a rare and valuable type of lunar rock with a high content of potassium (chemical symbol: K), rare earth elements (REE) and phosphorus (P), all extremely useful chemical elements.

L-1 through L-5: Lagrange Point 1. See Lagrange Points.

LAC: acronym for Lunar Aerospace Corporation, principal exo-armor and weapon manufacturer of CEGA.

Lagrange Points: five points in space located around two bodies that revolve around each other in nearly circular orbits; the gravitational forces of the two bodies combine with their motion and the motion of the points in space to provide regions of relative equilibrium at which other, smaller bodies (such as asteroids or colony cylinders) can "congregate" instead of orbiting independently —

and, for colony cylinders, inconveniently — around the large bodies. Three points are located on the axis connecting the centers of the two large bodies: L1 is located between the two bodies, L2 is located "behind" the smaller body and L3 is located "behind" the larger body; these points are unstable and are largely useless except as curiosities. The L4 and L5 points, however, are stable enough to be useful. They are located on the orbit of the smaller of the two large bodies and are found 60 degrees "ahead" (L4) and 60 degrees "behind" (L5).

Laser: acronym for Light Amplification by Stimulated Emission of Radiation, a laser is a beam of coherent light, used for long range communication or to superheat and destroy a target.

LEO: acronym for Low Earth Orbit, a 300- to 600-kilometer radius, nearly circular orbit with a period of about ninety minutes for Earth.

LH: acronym for liquid hydrogen; it's a cryogenic fluid which must be kept at extremely low temperatures.

Linear Frame: the main control element of an exo-armor. It looks like an industrial exo-skeleton and completely supports the pilot, reproducing his every movement.

LOX: acronym for liquid oxygen; it's a cryogenic fluid which must be kept at very low temperatures.

Magnetic Sail (MagSails): a thin ring-like device that generates a magnetic field that can be pushed by the solar wind and the magnetic field of planets. It is a somewhat slow propulsion system, but it requires no propellant and is thus very economic. Magnetic sails have low field density but occupy a large volume of space (in excess of 60 km for even the smallest ships).

Maser: a laser beam composed of microwave radiation, used as a detection device or (more rarely) as a weapon.

Massdriver: a weapon that uses a series of consecutive magnetic rings to propel a hail of small shells to extremely high speeds. Also, a magnetic launcher based on the same principles, used to accelerate spacecraft and cargo.

Missiles: self-propelled, self-guided projectiles, using sophisticated guidance computers and laser targeting technology.

M-Pods: short for maneuver pods, tiny free flying spacecraft used to move objects around (slang term).

NAS: acronym for Non-Aligned States, a group of Earth nations not incorporated within the CEGA structure.

Nomads: colloquial term for groups of people that live on asteroids, outside of mainstream human society.

Occultation: the concealment of one celestial body by another.

Odyssey, the: a political crisis that took place in 2210 — the 23rd century equivalent of the Cuban Missile Crisis, mixed with 9/11. A group of Jovian citizens tried to extract a CEGA scientist and ended up running from a CEGA fleet all the way back to Jupiter, where the fleet attacked the Jovian capital before being stopped. Almost led to general war in the solar system.

O'Neill Island: a type of colony cylinder that uses glass panels and mirrors to direct sunlight inside. Island Type I is a sphere with agricultural rings attached, while both Island Types II and III are large cylinders with reflective mirrors.

Orbit: the path traced by a celestial body (natural or artificial).

OTV: acronym for Orbital Transfer Vehicle, a small rocket ship used to move about in orbit. It usually lacks the thrust required to lift up from a planetary surface.

Particle Cannon: also known as beam cannon, it's a magnetic accelerator designed to shoot ions instead of a solid slug. They cause damage through a combination of raw kinetic energy, heat and induced electrical charge.

Periapsis: the closest point that a body reaches on an orbit around any other body; the "generic" root of "perihelion" and "perigee."

Perigee: the lowest point that a body reaches in its orbit around a planet.

Perihelion: the closest point that a body reaches in its orbit around the Sun.

Plasma: very hot gaseous mix of high-energy electrons and ions moving freely about. The fourth state of matter after solid, liquid and gas.

Plasma Combustion Chamber (PCC): one of the most common types of space propulsion systems in use. Using an inert gas or liquid as reaction mass (most often hydrogen or water), the PCC enables spacecraft to achieve great acceleration for extended periods, reducing travel times to mere weeks and, sometimes, mere days.

A

Plasma Lance: a compressed-gas cylinder with an ionizer ejector system at one end. Powerful current transforms the gas into a giant plasma flame that can be used as a cutting weapon.

Railgun: a weapon that magnetically accelerates a single projectile via twin conductive rails along the length of the barrel.

Regolith: loose top layer of soil found on airless celestial bodies; it is made up of crushed rock, dust and meteor debris.

Rem: a unit of measure for radiation.

S Asteroid: stony asteroid, rich in silicates of iron and magnesium, feldspar, iron-nickel alloy and iron sulfide.

Screen Generator: a device that protects the vehicle or space suit on which it is mounted by either absorbing or deflecting the radiation striking it.

Shield Volcano: volcano with a large base and gentle slopes created by repeated lava flow; the famous Mont Olympus on Mars is the largest one in the Solar System.

Sidereal Period: the revolution period of a satellite around its primary as measured against the nearly fixed background of stars. In the case of planet Earth, it is equal to one year.

Skyhook: a more feasible kind of "space elevator" that allows cargo to be hoisted up into orbit. It consists of long tether extending from a low orbit space station, down into the upper atmosphere and up into space. Hypersonic suborbital planes can match velocities with the lower end of the tether, just above the atmosphere, to hook up their cargo rather than spend the energy and fuel to go up to a full orbit.

Snowball: slang term for water ice-rich bodies such as comet cores.

Sol: one Martian day, equal to 24.6 Earth hours.

SolaPol: short for Solar Police, the law-enforcement agency of the United Space Nations.

Solar Sail: an extremely thin, highly reflective sail that is pushed by light beams (either solar or laser-generated). It is a slow propulsion system, but it requires no propellant and is thus very economic. Solar sails are extremely fragile and occupy a large area of space (several square kilometers for even the smaller ships).

Solar Wind: the sleet of charged plasma from the Sun that travels outward into the solar system. It is used to drive MagSails.

Space Elevator: a space station placed in a geostationary orbit above a planet or other celestial body, that extends a tether all the way to the ground. The latter can then be used to hoist material to orbit without need for a spacecraft. A prototype was built on Mars, the lower gravity making it less difficult to design, but it was destroyed in 2210.

Specific Impulse: a measure of the performance of rocket engines; it is the number of seconds an engine will supply one kilogram of thrust on one kilogram of fuel. The higher the number, the more efficient the engine is. It is often abbreviated as /Isp//.

SPS: acronym for Solar Power Satellite, these are used to gather sunlight and convert it to electrical power ready to be beamed to a nearby world or colony.

SSTO: acronym for Single Stage To Orbit — a spacecraft that does not need to discard boosters or other rocket stages to reach orbit from a planet's surface.

TAV: acronym for TransAtmospheric Vehicle, an aircraft that can fly out into space on its own.

Terminator: the boundary between the illuminated ("day") and dark ("night") portions of a planet or satellite.

Transit: the apparent passage of a small celestial body across the face of a larger one.

Ultraviolet: electromagnetic radiation with a wavelength shorter than visible violet light.

United Space Nations (USN): an advisory council, the USN is the successor of the 20th century's United Nations.

Van Allen Belts: radiation zones of charged particles trapped in powerful magnetic field lines.

Venusian Bank: also called VenusBank, a powerful economic corporation, based on Venus.

Vivarium Colony: a type of colony cylinder that is closed and protected against radiation by a thick coat of rocks or armor, relying on a "sunline" running along its axis to provide illumination. Mostly used by the Jovian Confederation.

Zocalo: Nomad marketplace/carnival.

▶ BIBLIOGRAPHY

The following books are texts that were used while preparing this book and the rest of the **Jovian Chronicles** line. They are scientific or speculative manuals for the most part, with a few astronomy books thrown in. Many are overtly technical and may be too detailed for the average run-of-the-mill campaign, but they all show fascinating technology that have the potential to change history.

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▼ FICTION

'Hard' science fiction is a well-known segment of the whole SF continuum. Famous authors such as Arthur C. Clarke, Isaac Asimov and Robert A. Heinlein have published many novels in which the physical laws of the universe are not only respected (for the most part) but *used* by the heroes to escape whatever plight they might find themselves into. Obviously, this section could take up several pages. The following books are sugegsted because they are set in worlds with about the same level of technology as the **[[Jovian Chronicles]]** universe.

Clarke, Arthur C., *The Hammer of God*. The crew of the space ship *Goliath* race to prevent an asteroid from hitting the Earth. Apart from the 'brainman' technology, it gives a good idea of life aboard a deep space vessel. Also from Clarke, *The Fountains of Paradise*, for ideas on skyhooks, and the seminal *2001: A Space Odyssey* and sequels.

Heinlein, Robert A., *Have Space Suit, Will Travel*. A young man wins a space suit and is subsequently kidnapped by aliens. Though the latter part is not very useful, the book does a wonderful job of describing a space suit and what it feels like to use one.

Robinson, Kim Stanley, *Red Mars* (and its sequels, *Blue Mars* and *Green Mars*): the trilogy that will remains as the story of the colonisation and subsequent terraformation of the red planet. A bit technical, but well worth your time.

Steele, Allen, *Orbital Decay*: a very realistic look at near future space industrialisation, this novel follows the lives of the beamjacks who build powersats in high orbit. Also from Steele, check out *Lunar Descent* (a sequel of sort), *The Tranquility Alternative* (an alternate world story with well-described space hardware) and the short story collection *Rude Astronauts*.

Sheffield, Craig, *Cold as Ice*. A novel set among the Jovian societies, which explore themes such as life in space and uncontrolled scientific research. Highly suggested for ideas for a Jovian Confederation-based campaign.

▼ ELECTRONIC RESOURCES

There are a lot of space-related resources and documents on the World Wide Web. Here are a few permanent Web sites worth checking out. Web searches can also be done with keywords such as 'space travel' or 'space colonies,' which will yield many more links.

The Dream Pod 9 Web site http:www.dp9.com

The official NASA homepage http:www.nasa.gov

The Jet Propulsion Laboratory http:www.jpl.nasa.gov

The National Space Society http:www.nss.org

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Ryu (Venus Exo), DP9-421	$6.95us/$7.99can x ___ = $ _____
Fury (CEGA Exo), DP9-422	$8.95us/$10.29can x ___ = $ _____
Brimstone (Mercury Exo), DP9-423	$7.95us/$9.14can x ___ = $ _____
Stormrider (JC Exo), DP9-431	$8.95us/$10.29can x ___ = $ _____

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