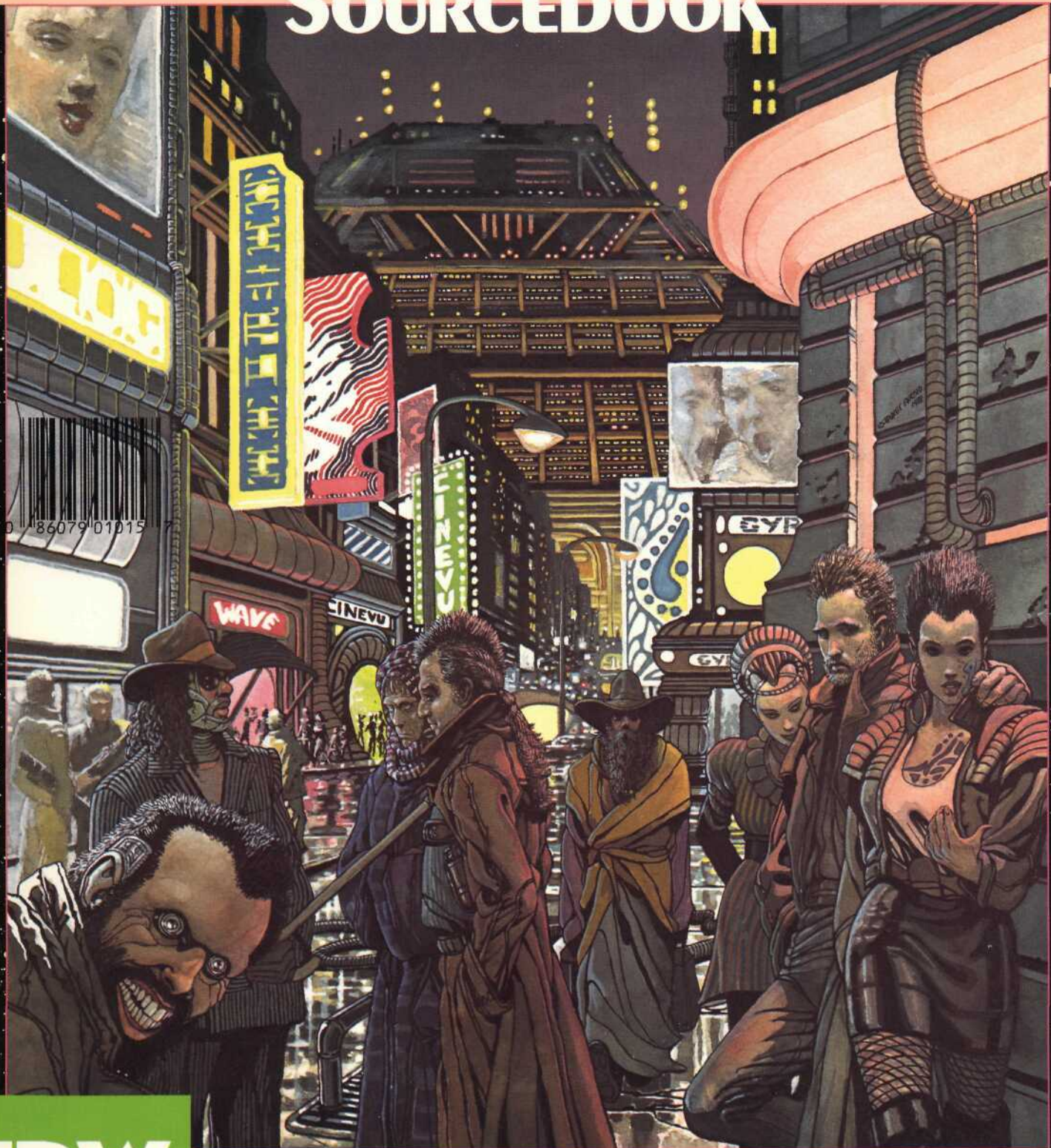


EARTH/CYBERTECH

Sourcebook

Lester W. Smith



GDW

Adventure At Man's Homeworld

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Hunger...

EARTH/CyberteCH SOURCEbook

Adventure At Man's Homeworld

Lester W. Smith

2300AD

Since 1973



Earth/Cybertech Sourcebook is a resource book for adventures on the Earth of the **2300 AD** science-fiction role-playing game.

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Introduction

Regardless of how far humanity spreads itself in the galaxy, Earth will always be its home. A biochemical bond exists between each human and the planet that spawned his race, and that bond is clearly felt when he stands on Terra and breathes its air.

In the 24th century, despite the number of colony worlds that exist, the majority of humans still live at the Core, and most of them by far live on Earth. But Earth in 2300 is not the same as it was in the 20th century. In many ways it is kinder, more gentle with its citizens, but there are still places that harbor danger and excitement.

The Earth/Cybertech Sourcebook is intended to serve as a guide to 24th-century Terra for both player and referee. The book's first function is to describe nations and regions of the world in more detail than was possible in **2300 AD's** basic game rules, allowing players to better understand how the world of the future is shaped. Its second function is to provide cybertech rules and guidelines for groups wishing to play cyberpunk adventures on Earth. As the title indicates, these two functions are divided somewhat, allowing the *referee* to run the Earth with as much, or as little, cyberpunk influence as he desires.

WHAT IS CYBERTECH?

Cybertech is a term that includes the technologies common to the cyberpunk genre of science fiction. These technologies include surgical, chemical, and mechanical enhancements of the body and mind. With the rules included in this book, characters will be able to purchase the implantation of supplementary muscles to dramatically increase their Strength, have their Intelligence chemically boosted, obtain subdermal melee weapons, buy bionic limbs and organs to give them enhanced abilities, or have neural jacks installed in their skulls to allow them to plug in supplementary skills or to project their minds into the cyberspace of Earth's computer net and risk their sanity in battle with corporate mainframes.

ORGANIZATION

This book is divided into two main subjects, each with its own introductory chapter. The first subject primarily covers data concerning the various nations of the Earth in the 24th century. The second covers cyberpunk as it fits into the Earth of **2300 AD**.

Besides this "Introduction," the **Earth/Cybertech Sourcebook** includes the following sections:

- "The 24th-Century World," a general overview of Earth in 2300, outlining the major themes of its society and identifying the focus of attention in the descriptive chapters that follow.
- "OQC," or Orbital Quarantine Command, which describes the protective shell of stutter-warp warships that surround Terra, ensuring that no extra-terrestrial contaminant brings ecological disaster to Earth.
- "Gateway," describing the duty-free port city that hangs at the upper reaches of Earth's beanstalk, and including diagrams of Gateway and the beanstalk itself.
- Several chapters devoted to individual nations or to continents, describing their history since the Twilight War and their present status in the world.
- "Cyberpunk: An Introduction," which describes the cyberpunk view of 24th-century life and begins to prepare the *referee* for running cyberpunk adventures.
- "Bionics," which lists statistics for all sorts of surgical, chemical, and electromechanical personal enhancements.
- "Cyberspace," describing the illusory world of the cybernet, the computer decks that are used to enter it, and combat rules to use when fighting other computers.
- "Worm in the Big Apple," a cyberpunk adventure involving an insane Provolutionist attack on New York City.

Using this Sourcebook, your **2300 AD** campaign can take on a new twist, allowing your group to play adventures against cybernetic villains on the dark, rain-slicked streets of Terra's metropolises.

HOW TO USE THIS BOOK

The Earth/Cybertech Sourcebook is intended to be used by player or referee. For the player, the sourcebook provides information and maps to help Earth in 2300 become more understandable. For the referee, the Sourcebook will not only aid in understanding 24th-century Terra, but will also supply rules and information to get a cyberpunk campaign started.

It is not necessary that the chapters in this book be read in the order that they are presented. Instead, the reader can turn to whatever part most interests him. As he continues to read different portions of the book, a picture will begin to emerge of what life is like for the masses of Earth in 2300 and what adventure possibilities there are to be found on the planet of humanity's birth.

The 24th-Century World

THE TWILIGHT WAR

One of the primary effects on the development of the 24th-century world was World War III at the end of the 20th century. This war is referred to frequently in the national and regional descriptions that fill the bulk of this book, often by its more common name, the Twilight War.

Those wishing to gain more information concerning the Twilight War can turn to GDW's **Twilight: 2000** role-playing game and its modules. **Twilight: 2000** is set in the last days of the Twilight War and continues into its aftermath.

The world view presented in this book is predominantly Western. Generally speaking, more emphasis is given to the nations of the West than to any other region of the globe. And within this description of the Western viewpoint, the most emphasis is given to North America, particularly to America itself. In the descriptions of other nations, America and Texas are often given as points of comparison, serving to emphasize their importance in this book's approach. Because of the importance of Japan and Australia to American economy and culture in the 24th century, these nations also receive a disproportionate amount of attention.

Those countries that receive the least attention in this book are the nations of Asia and the Middle East. It is not the case that these nations are less important to the world of 2300 than the Western nations; it is merely that an assumption has been made that referees and players are generally most familiar with, and most interested in, the Western world.

INFLUENCES ON THE WESTERN WORLD

The world of 2300 shows its 20th-century roots very strongly. The names and relative sizes of many nations have remained the same, for instance, as they were during the course of the 1900s. Many of the changes in national boundaries and names have been direct results of the Twilight War, which occurred at the tail end of that century. But over the ensuing 300 years, a lot of history has flowed past as well, and there are new influences in the world. An understanding of those influences will help players and referees of **2300 AD** to better picture what 24th-century Earth is like.

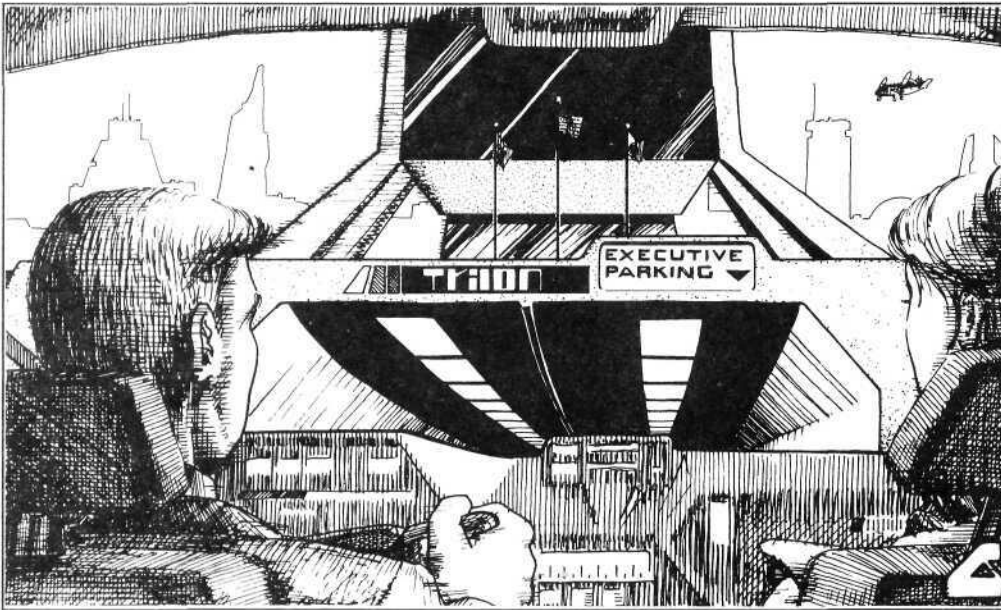
The majority of the Earth's citizens are multilingual... reflecting the unity of Terra's nations. War between nations is almost unheard of. No longer does a nuclear arsenal hang over the Earth's citizens; there are no superpowers to support such military extravagance.

Quality of Life

Across the entire surface of the globe, in nearly every nation on Earth, the quality of the average citizen's life has improved dramatically since the 1900s. Average life expectancy is 90 to 100 years. Food is plentiful, and industrialization has freed the majority of the Earth's population from the back-breaking toil that was characteristic of the 20th-century third world nations (which included most of that age's world population). Infant mortality rate has dropped remarkably, as has the incidence of disease, leaving people a gentler life than was ever before possible.

Good education is the rule across the entire globe. Somewhere near 90 percent of Terra's population is now literate, a large proportion are college-educated, and the majority of the Earth's citizens are multilingual, this last fact reflecting the unity of Terra's nations. War between nations is almost unheard of. No longer does a nuclear arsenal hang over the Earth's citizens; there are no superpowers to support such military extravagance.

There are still some trouble spots of suffering and unrest, however. The fragmented nations of the Indian subcontinent clash periodically, as do the states of Cantonese-dominated Indochina. China and Mongolia are still populated by people living in primitive conditions, and the government of the Inca Republic is often accused of human rights violations. The largest of Earth's cities also hold slums where great numbers of people live in abject poverty, or in social rebellion, at the feet of towers belonging to the ultra-rich.



Nations Versus Megacorporations

With the rise in world travel and international business, a number of corporations have grown to such size that they have become international in vision, leaving behind the heritages of the nations where they were born. Feeling no allegiance to any nation, these business conglomerates have often found that their only remaining constraint is the need to make a profit. The laws of individual nations in which they operate their branches begin to seem arbitrary and, as a result, the megacorporate directors do not consider it unethical to circumvent them, so long as they pay the penalty if they are caught. The power of many of these megacorporations has grown to such an extent that it rivals that of nations, and an ideological struggle has developed in world society, as national governments seek to limit international corporate size and the international corporations seek to bring to political power those friendly to them.

Their only remaining constraint is the need to make a profit.

Alien Cultures

The discovery of alien races among the stars has had a profound impact on how the average Earth citizen views his world. The purported Pentapod blurring of the line between intelligent beings and their tools mirrors humanity's struggle with its own bio-engineering technology. The ferocity of the Kafer War has shaken Earth's belief in the possibilities of interracial compromise and cooperation. The result of the influence of these forces on the general public has been a new confusion concerning humanity's role in the universe.

Nostalgia for the 20th Century

In the Western world, the combination of the problems mentioned above has brought about a nostalgia for the time just before the Twilight War. The 20th century was a time of rapid change for the Western world; each decade brought with it new fashions, new slang, and a new view of the future. This nostalgia is especially evident in urban settings where Flash Gordon-style architecture stands next to 1920s nickelodeon theaters, and leather-clad punkers with purple mohawks mingle with Phillip Marlowe look-alikes and 1970s-type flower children.

RUDELL UNITS

Throughout the national and continental descriptions that follow in this book, a commonly used term is the Rudell unit. Jurgen Rudell (2120-2189) was an economist who was born in Hanover and renowned for his work with industrial capacity and forecasting. His chief contribution to future generations was the creation of the Rudell unit, a measuring system designed to measure one nation's industrial output against another's in order to calculate balances of trade. Though the applications Rudell intended are universally considered out of date today, the Rudell unit is still common parlance among economists and governments. In short, one Rudell unit represents the work of 1,000,000 well educated individuals directly involved in the hands-on manufacture of industrial goods, including machinery, public works, and general construction.

OQC AND TOURISM

Passengers destined for Earth's surface are subject to intensive scrutiny by OQC. Luggage is carefully examined, and any item that is questionable is confiscated until the character leaves Earth once again. For this reason, it is often simpler to leave all belongings behind when visiting Earth and simply purchase what is necessary once you have reached the planet's surface.

Passengers leaving Earth are not subject to OQC inspection (although they are inspected less thoroughly by the travel facilities they use). Therefore, it is possible to take souvenirs from Earth back home.

When Earth's early explorers travelled to new continents, they discovered that local life forms were often quite different from those they were familiar with—different in ways that changes in climate could not account for. Soon, these explorers were transplanting animals and plants from the new continents to their home continents, and vice versa. In this way, potatoes, tomatoes, and tobacco came from the new world, and coffee and the horse were transplanted from the old. But disease organisms were transplanted as well. Multitudes of American Indians died off from diseases brought to them by unsuspecting explorers.

As the planets of the solar system were explored, care was taken that no contaminants be brought back to Earth. It was feared that if the danger of intercontinental contamination had been great, the danger of interplanetary contamination could be even greater. However, no life forms were found on any of Sol's other planets, and humanity soon felt fairly secure in travelling through the solar system.

When interstellar travel became a possibility, the concern for potential contamination became greater than ever before. Although the colonization of other worlds would give humanity an increased chance of survival in the galaxy, that same colonization had the potential to destroy the human race with plague if care were not taken to prevent cross-contamination.

An international treaty was signed to allow for the creation of a jointly maintained inspection system that would ensure that all cargoes delivered to Terra would be stringently inspected to preclude the possibility of Terra's ecosystem being infected with any harmful alien life form. The consensus was that such stringent measures need not be instituted on all colony worlds; each world could decide for itself the amount of risk it was willing to take. Nor was it necessary (or economically feasible) to protect the entirety of humanity's home system. All that was required to ensure the survival of the race was that one world be carefully protected, and the logical choice was Earth.

The protective system became known as Orbital Quarantine Command (OQC).

On the first few worlds that Earth colonized, the biochemistries were so incompatible with Terra's that humans had absolutely no problems with alien-spawned diseases. This proved fortunate for Earth, as it allowed Orbital Quarantine Command to test and refine its procedures for dealing with incoming traffic before any serious threat was encountered.

THE ORGANIZATION OF OQC

OQC is jointly operated by all of Terra's starfaring nations. Its central office is located at Gateway, at the top of the beanstalk. A delegation from each starfaring nation is included in this office, and extra space is provided for the offices of less powerful nations that wish to be included on OQC's supplemental advisory board. Most of the nations on this board have solar system travel capabilities but no starships.

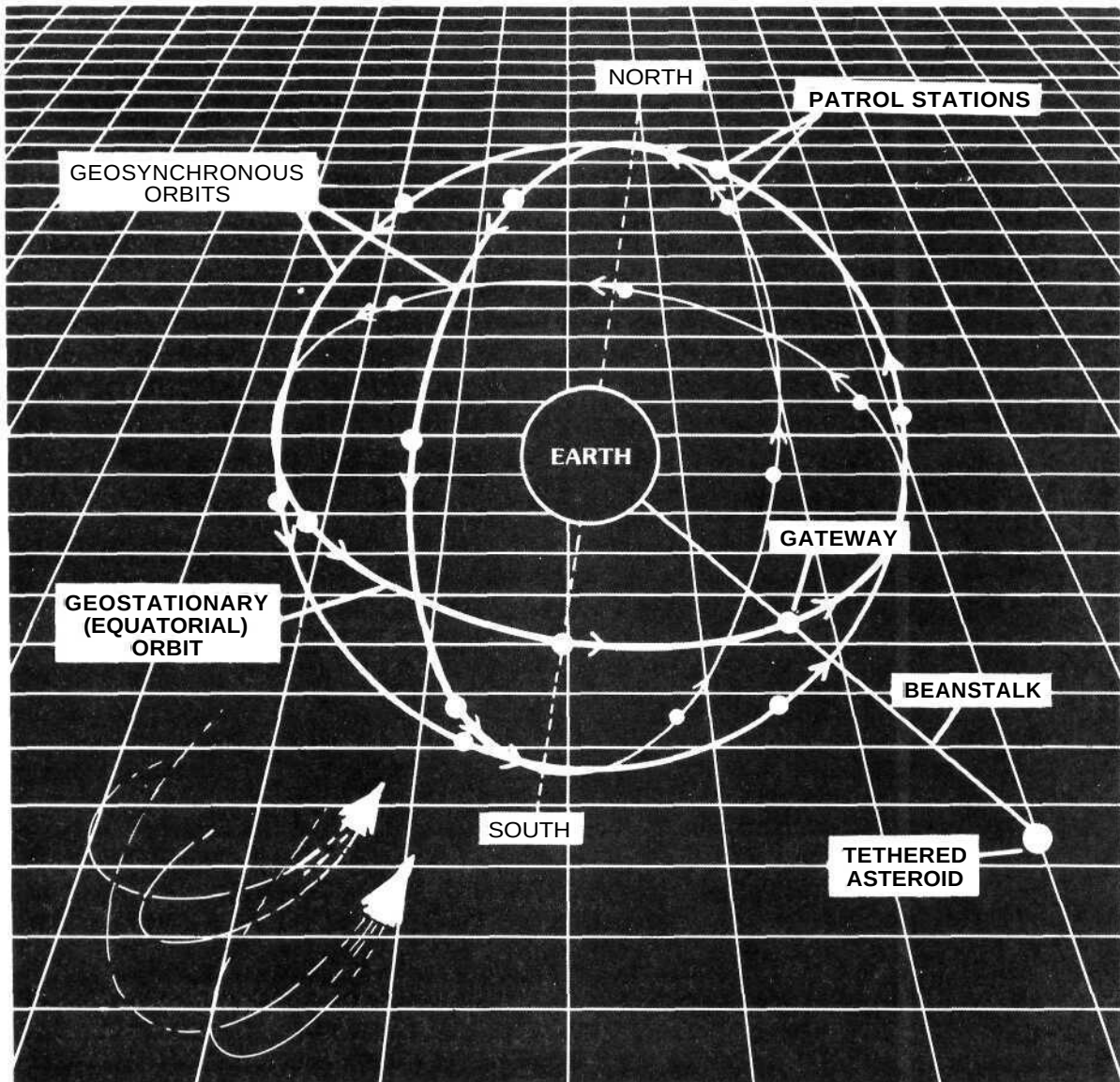
The directors of OQC are elected yearly by the starfaring nations' delegations. The advisory board can participate in the nomination process, but its members have no vote in the final election.

OQC's facilities outside of Gateway consist of a multitude of stutterwarp warships drawn from navies of the various starfaring nations. These ships are positioned in orbit around Terra in such a way as to detect every incoming vessel, stutterwarp-capable or not. Every six months, a new set of warships is assigned to the positions.

In effect, OQC consists of a blockade of military ships intended to stop every vessel entering Terran orbit. If the ship is dropping a cargo, that cargo is quarantined on the ship for a period of many hours while trained inspectors check it carefully for potentially dangerous substances or organisms.

Non-organic cargoes are typically treated to destroy any latent organisms, then cleared within a matter of a few hours. Organic cargoes typically require gentler treatment and are quarantined and observed for as much as a few days. Living cargoes (including passengers bound for Earth's surface) are subjected to intense scrutiny over a period of a week or more before being allowed to continue on their way.

OQC ORBITS DIAGRAM



Gateway

FRANCE AND GATEWAY

Although Earth's beanstalk is jointly owned by the members of the ESA, it rises from the soil of Libreville in Zaire, a department of France. Because of this, Libreville reflects a predominantly French influence.

Such is not the case with Gateway. French presence is certainly evident, but it is thoroughly intermixed with the presence of members of nearly every other nation on Earth as well. This true internationality has helped to keep Gateway free from domination by any one nation or bloc of nations.

At the top of Earth's beanstalk hangs the planet's primary port of entry—Gateway. Gateway rests just inside the edge of the protective shell of OQC, and houses the offices of that facility as well as the offices of Gateway itself and representative offices from a multitude of governments and businesses. Numerous satellites circle the Earth in the same orbit as Gateway. Some are orbital factories, others are docking facilities, and still others are entertainment or hotel facilities.

The best way to gain an understanding of Gateway is to imagine it as a massive international city. Not all of Earth's traffic is handled through this port, but a good portion is—at present estimates, at least 20 percent of Earth's cargoes and 60 percent of its passengers pass through Gateway on their way to or from the planet.

Gateway is an exciting, wild-and-wooly place.

Two major reasons account for this popularity. The first is the beanstalk. The beanstalk provides Gateway with dependable, inexpensive travel to and from Terra's surface, and it also serves as a ready source of cheap power, helping a facility as extensive as Gateway to remain competitive. Solar collectors at various heights along the beanstalk cable harvest the sun's light, yielding power not only for the beanstalk itself, but also for many of the nations surrounding the beanstalk's lower end in Libreville. The second major reason for Gateway's popularity is that it is a duty-free port. Like a futuristic Hong Kong in orbit, Gateway draws people from all worlds into an international mixture unlike anywhere else. Nearly anything a person might want can be found at Gateway, if enough time is spent to find it and a sufficient amount of money is involved.

RUNNING ADVENTURES AT GATEWAY

Gateway is an extensive enough facility to allow for multiple adventures to be run there. On the next page, an overall diagram of the Gateway facility is given. After that diagram, the next few pages give floor plans of several portions of the Gateway facility, in order to help the referee to run adventures there. As an international, duty-free port, Gateway draws all sorts of individuals. But hanging in the vacuum of space, the facility also requires a very advanced technological system to maintain the life contained within its walls. When running Gateway adventures, the referee should work to convey both Gateway's liberty and its high technology as aspects of this atmosphere. It should become obvious to the characters that Gateway is an exciting, wild-and-wooly place, but it should be equally obvious that this freedom does not indicate laxness in the physical maintenance of the facility.

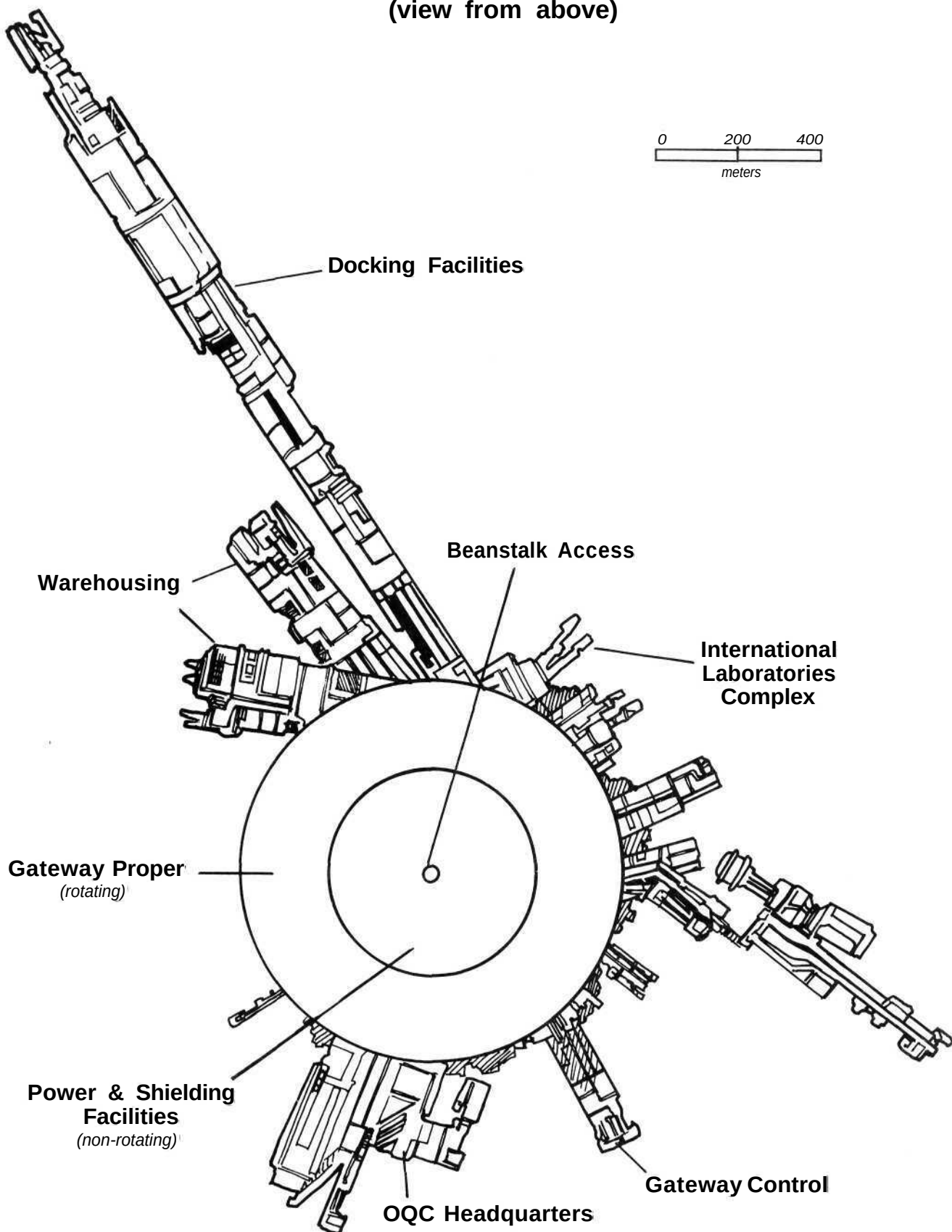
THE BEANSTALK

Also included in this chapter are two pages of diagrams involving the function of the beanstalk. These diagrams include a comparative view of Earth's beanstalk and the only other one in existence in human space, the beanstalk at Beta Canum Venaticorum-4. From this comparative view, the referee can gain some idea of the scale involved in beanstalk travel. A sample system diagram is also included to give a better understanding of the components included in a beanstalk's construction. A cross-sectional diagram of the beanstalk and a capsule helps to indicate comparative sizes, and a side view capsule diagram identifies the levels in a beanstalk passenger capsule. Several floor diagrams give layouts for the levels of that passenger capsule.

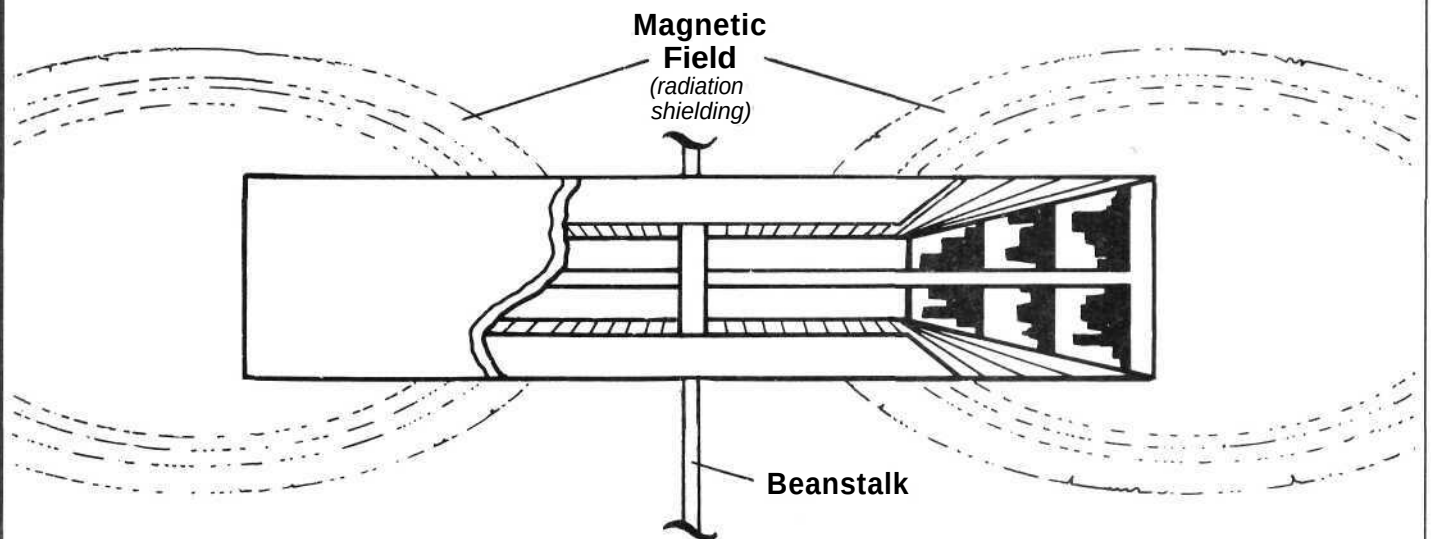
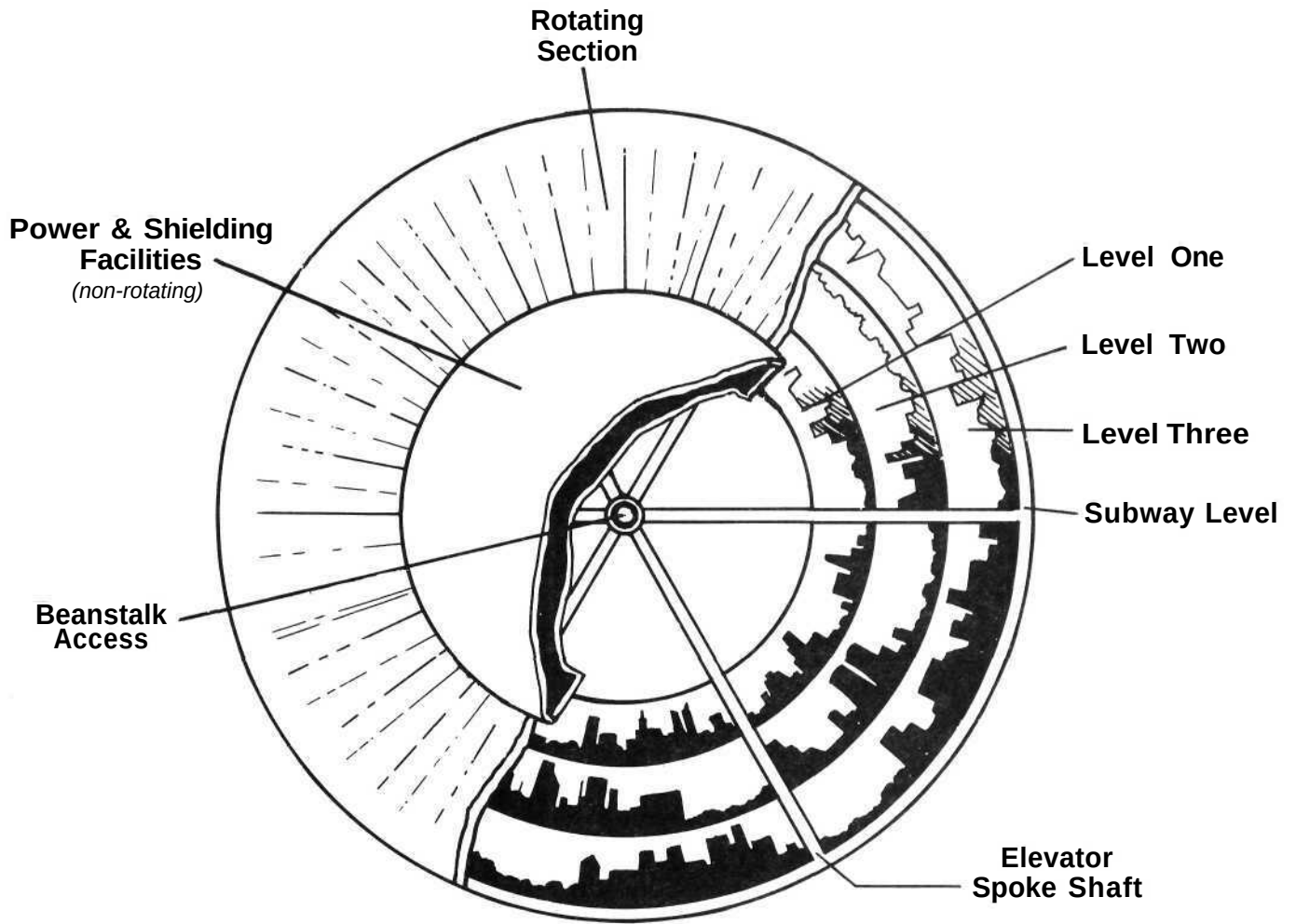
A Gravitational Effect Table completes the collection of beanstalk diagrams, identifying day by day what apparent gravity a passenger in a beanstalk capsule would perceive, given the interaction of the actual gravity at that distance from the Earth's surface and the centrifugal force that is imparted from the cable.

GATEWAY

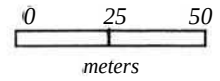
(view from above)



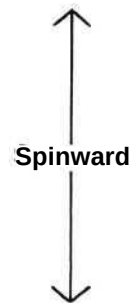
GATEWAY PROPER



GATEWAY PROPER SAMPLE FLOOR SECTION (Level Three)



Business District

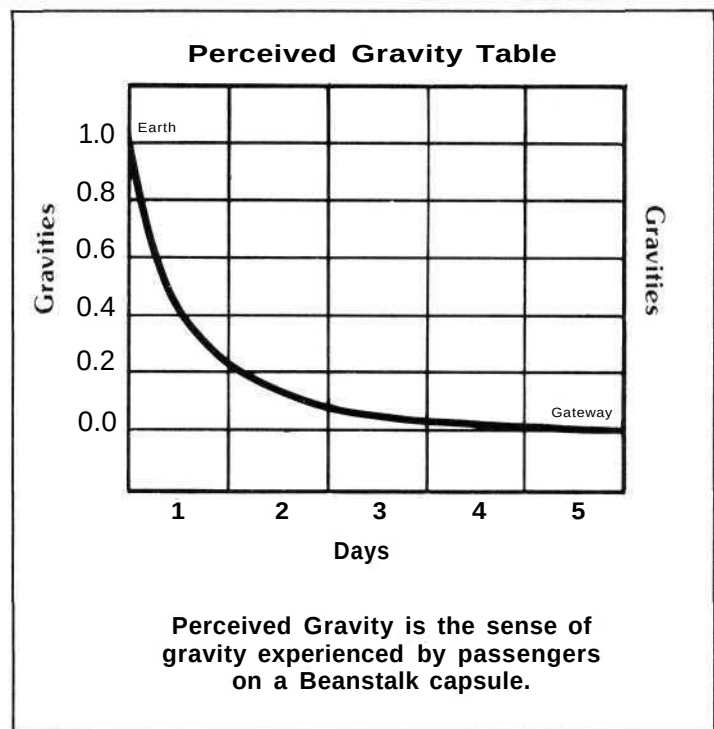
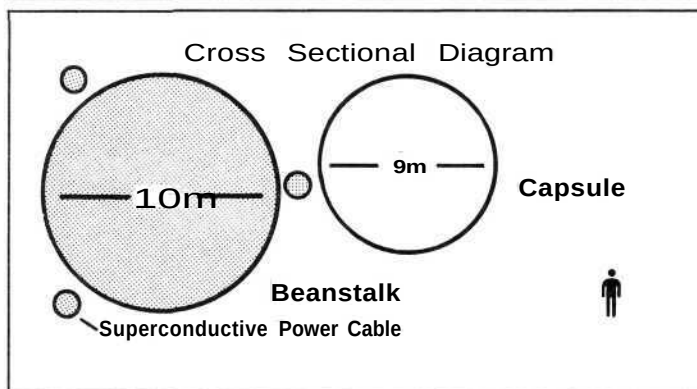
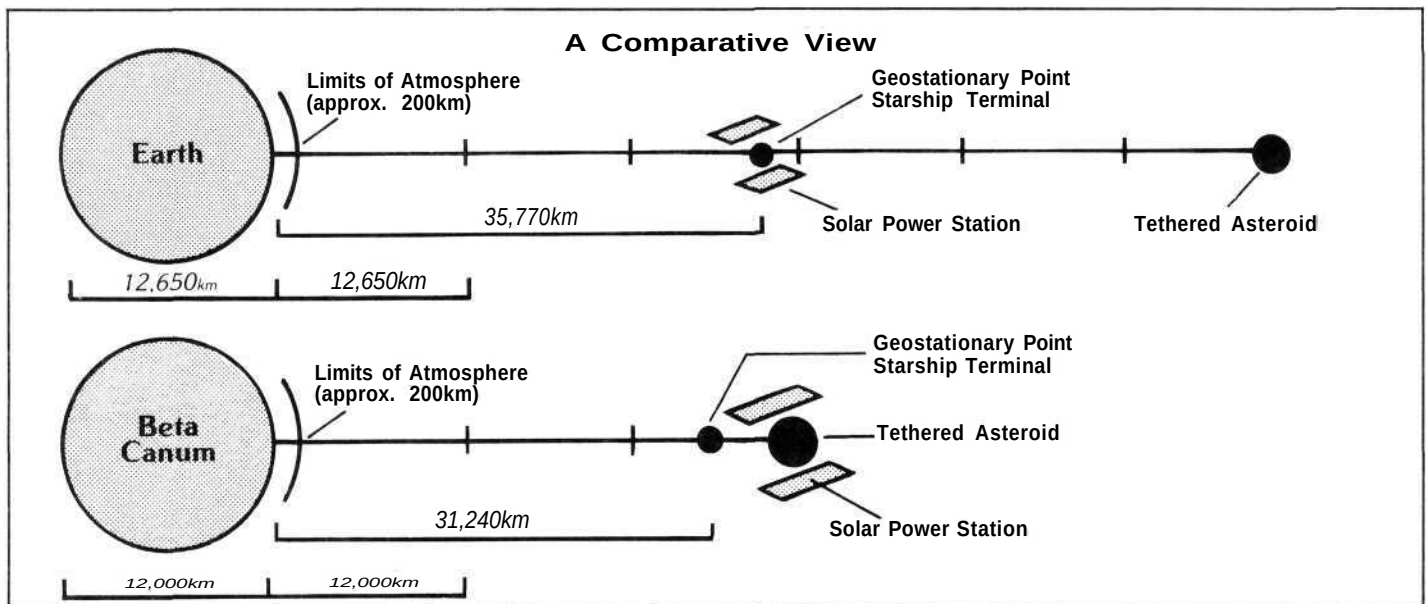


Residential District

KEY

-  Major Thoroughfare
-  Secondary Walkway
-  Artificial Stream
-  Elevator Spoke
-  Major Building
-  Park

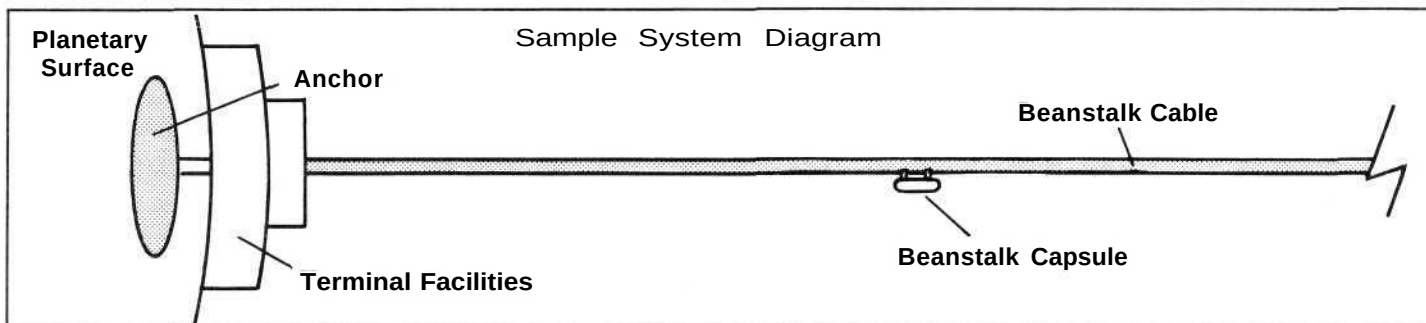
BEANSTALKS



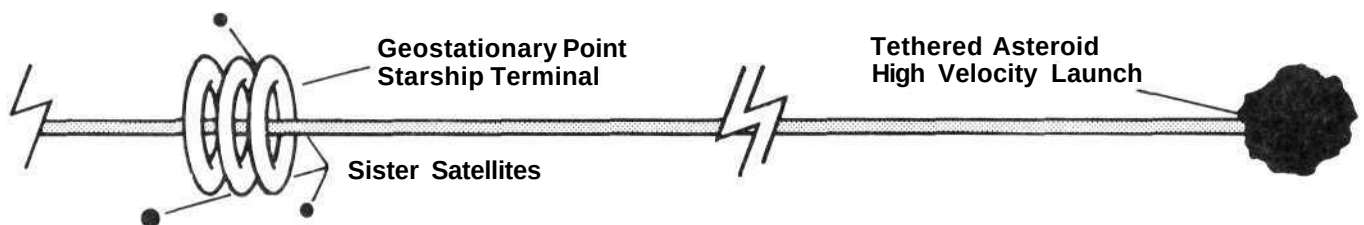
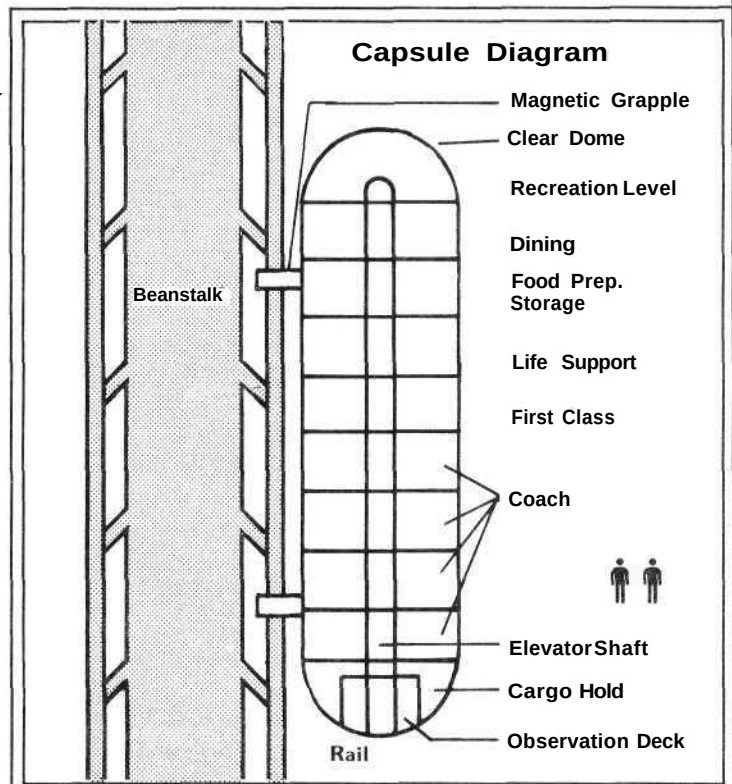
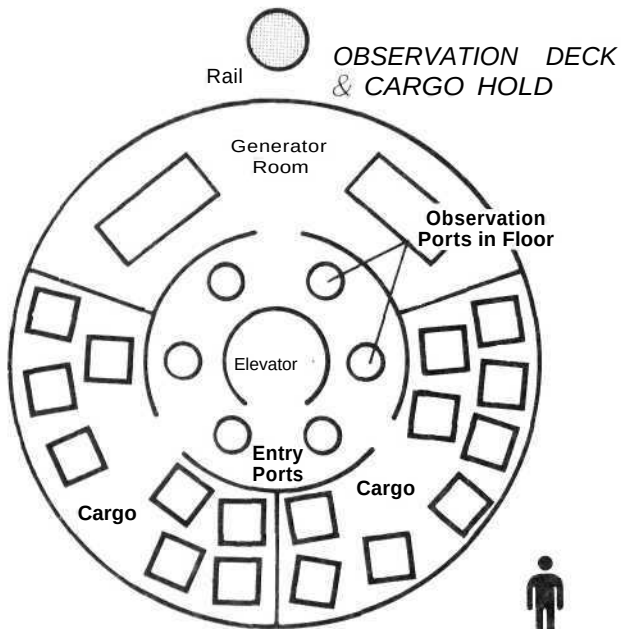
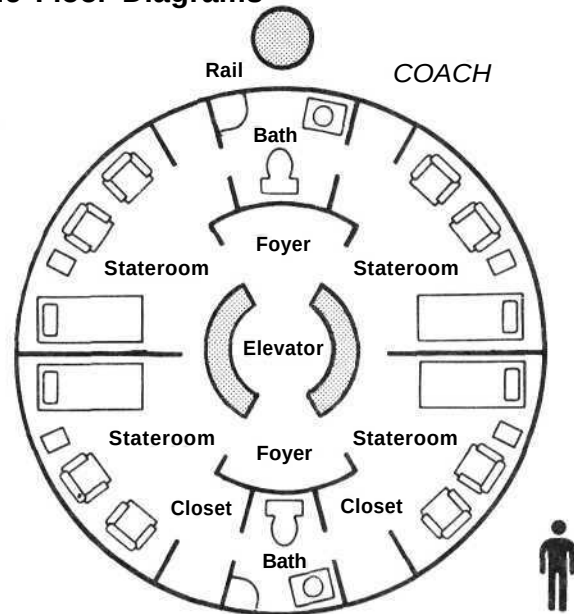
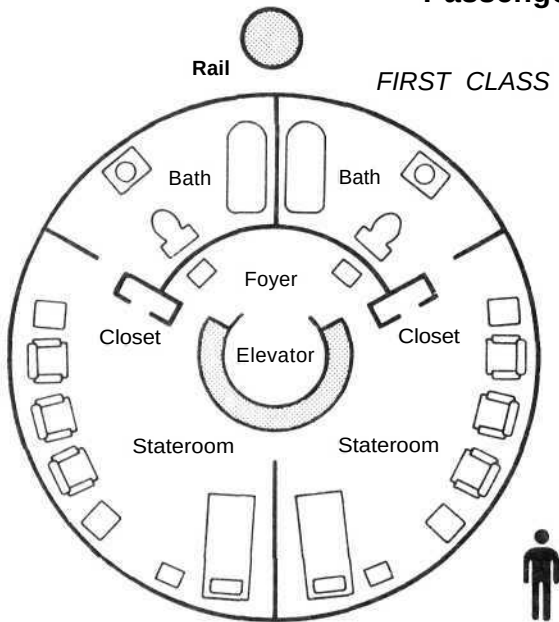
Capsules: 9m diameter, 25m length

Cargo Capsule: 1200 cubic meters capacity approximately 1000 tons of cargo

Passenger Capsule: 18 passenger capacity



Passenger Capsule Floor Diagrams



America

AMERICAN DEMOGRAPHICS

The population of America in 2300 is slightly less than in the latter part of the 20th, but once the loss of southern California, Texas, and most of Arizona and New Mexico is taken into account, it can be seen that population in the remaining regions has actually increased.

*Population: 211,540,000 (85% urban, 15% rural) Literacy: 100% College Education: 89% Life Expectancy: 92.1 male, 94.5 female
Largest Cities:
Chicago (2,340,000),
New York (2,255,000),
San Francisco (2,087,000)*

In many ways, 24th-century America is strikingly different from America of the 20th century. Perhaps most obvious is the introspection, bordering on isolationism, which developed after the nation lost its superpower status. America in the 24th century seems at once less overtly boastful of its abilities and yet more self-assured.

HISTORY

After obtaining independence from Great Britain in the 18th century, America struggled as a new colonial power both to guard itself and to dominate the other nations of the Western Hemisphere. A mere 80 years into its history, however, America was already torn over issues of slavery and states' rights and forced into bloody civil war—a war which nearly shattered the young nation. But the secessionist states lost that war, and the nation remained one political unit.

During the latter half of the 19th century and nearly all of the 20th, America was effectively in complete control of affairs in the Western Hemisphere and was a dominant force in world events. The country projected its will and military might in many conflicts during this period, including all three world wars. American involvement in world affairs during this period could be attributed not only to a commitment to help its allies, but even more to an American belief that the nation was *the* paragon and linchpin of Western democracy.

The Third World War brought an end to America's superpower status. As a result of the commitment of money and military forces to the fighting in Western Europe, and of the collapse of the world economy, the nation was plunged into chaos in the midst of famine and desolation. Civilian government, military government, and ultra-rightist New America struggled among themselves as to who would pick up the reins of power in the nation.

During these years, America lost both Texas and much of the American Southwest. Chaos reigned for 20 years before Civgov and Milgov patched up their differences and united to bring down New America and establish federal authority once again. Extensive public work programs were instituted to rebuild the nation and the confidence of its peoples, so that by the end of the century America had settled into its new role as an equal among competitive industrial nations, all under the umbrella of the French Peace.

Late in the 21st century and into the early 22nd, America became embroiled in war with Mexico over Texan independence (2099-2103) and then in supporting what had been southern California against Mexico in a Mexican civil war (2103-2106). Texas gained its independence, but southern California remained in Mexico's hands. Mexican and American rivalry has lived on from those troubled times to the present.

America has spent most of the 23rd century improving the quality of the lives of its continental inhabitants and consolidating its off-world assets.

In the mid-22nd century, America began to concentrate upon developing an effective space program, in close cooperation with Australia. The two countries' industrial power, combined with the resource of superbly educated populations did much to allow America and Australia to dominate an entire arm of stellar exploration and, eventually, colonization. An American colony was established at Mu Herculis in 2215 and on Ellis in 2229. America has traditionally had a large presence in the Sol system, with L4 and Mars outposts, as well as in interstellar space.

America has spent most of the 23rd century improving the quality of the lives of its continental inhabitants and consolidating its off-world assets. Ellis was made a state of the Union on July 4, 2276, the quinticentennial of the United States.

24TH-CENTURY AMERICA

Americans' traditional notion of America as the greatest nation on Earth and of Americans as defenders of democracy in the world ended with the nuclear exchange and ensuing famine of the 21st century. A new direction of national effort and will dedicated itself toward the rebuilding of the nation nearly from scratch. The everyday struggle to survive drove notions of world domination far from the American mindset. A surge of nationalism and isolationism swept the country, easing the pain of a people taking a step backward in world ranking.

In 2300, America is a strong industrial and technological nation which provides a comfortable living for nearly all of its terrestrial population. The trend in population movement has been from rural to urban, but the actual population density in individual cities has come sharply down. These effects are due to four causes. First, a paranoia settled over postwar America for some time as people avoided plague and radiation areas even after they were safe to revisit or settle. Second, the increasing speed of transportation made travel between distant points less and less of a problem, and as a consequence, commuting distances increased dramatically. Third, as the nation turned increasingly to service industries, the need for centrally located offices diminished since distant points could be easily connected by computer network. Because of this last factor, a sizable portion of the population began to work at home or in local branch offices of their employers' businesses. Finally, as the suburbs of individual cities sprawled further and further, many cities became interconnected, and population figures began to be calculated merely on the basis of each city's core, population figures for suburbs being calculated separately.

Private Life

Private life in America has improved over the centuries as well. The typical 24th-century American household is quite comfortable, most homes being computer climate-controlled at all times. Government-sponsored entertainment, ranging from video broadcasts to theater and musical touring companies, keep the citizenry entertained.

In America, individual cities measure themselves very often by both their sporting teams and their entertainment facilities. Most cities have complete arenas or concert halls as central elements of their individual character.

Work

Advanced technology has allowed the American work force to be significantly reduced. A person can expect to begin a career after a lengthy specialized education, perhaps at age 28. Retirement is common around the age of 50, at which time social services will support a family at least at a comfortable level. Most families have only a single income.

Transportation

The American transportation system is one of the most advanced in the world. The nation's citizenry travel from point to point with relative ease.

Surface Transportation: A nationwide airfilm train network provides steady passenger and freight service between virtually all cities, supplemented by both intercity air and tunnel service. Personal transportation is confined to an out-of-date highway system and to modern air corridor regulation.

Interface Transportation: Much of America's interface needs are served by contract to Libreville-Gateway. There are numerous slingshots, most notably near Denver, Boulder, and Wheeling, to serve other freight needs. For passenger service, virtually all cities have regular space plane flights. Shuttle systems are also in operation in both Miami and Honolulu for passenger/freight operations.

Colonization

In order to maintain an expanding economy, off-world migration is greatly encouraged by the American government. Special monetary incentives are offered to families or individuals who will permanently emigrate to one of the American colony worlds. Overall, public response to these incentives has been good, and many hundreds of adventurous families emigrate every month, but the government is beginning to experience a problem in trying to convince the more comfortable people to leave for a less comfortable life elsewhere.

AMERICAN ECONOMICS

The American economy in 2300 is healthy, with steady growth and a high standard of living for American citizens.

Industrial Capacity: 77
Rudell Units Agricultural
Output: 107%, net exporter
of grain Mineral Production:
77%, net importer of metals
and radioactives, principally
from off-world Power Pro-
duction: 112% (80% solar,
72% atomic, 8% mineral),
net exporter of power (most-
ly to L4 and Mars) Principal
Trading Partners: Canada,
Nigeria, Great Britain,
France

NON-CONTINENTAL AMERICA

Non-continental America consists of four states: Alaska, Hawaii, Puerto Rico, and Ellis.

Alaska was invaded by the Soviets during the Twilight War, primarily to halt its oil production. Without continued support from the Soviet Union, the invaders were soon absorbed into the general population. In 2300, Alaska is a major producer of oil and a popular vacation spot.

Hawaii in 2300 is virtually unchanged from 20th-century Hawaii. The Twilight War brought short-term panic and rioting to the state's primarily urban population, but food resources were adequate for the population, and the state quickly recovered from its chaos. Tourism is still the state's primary industry, supplemented by specialized agriculture, such as sugar cane production.

Like Hawaii, Puerto Rico experienced some panic as a result of the Twilight War, but suffered no lasting effects. As a state, Puerto Rico in 2300 has become a real competitor with Hawaii as a vacation spot.

*Ellis is an American colony world at the far end of the American Arm of exploration. It is treated in detail in the **Colonial Atlas**.*

GEOGRAPHICAL REGIONS

Twenty-fourth-century America can be viewed as consisting of four major geographical regions: the Northeast, the Midwest, the South, and the West.

Northeast

During the period immediately preceding the Twilight War, the Northeast was the most populous region in America, as well as the most industrialized. It was also, of course, the center of government for the nation. The chaos following the Twilight War greatly reduced the Northeast's population, but left the majority of industrial areas virtually intact. Only a few areas had been hit by nuclear warheads (Delaware City, DE; the White House at Washington, DC; Andrews AFB, MD; Fort Meade, MD; Camp David, MD; Linden, NJ; Perth Amboy, NJ; Paulsboro, NJ; Westville, NJ; Philadelphia, PA; Marcus Hook, PA), and these were typically oil facilities, Presidential Emergency Facilities, or military headquarters. The warheads were all air bursts, wreaking considerable damage but causing very short-lived radioactivity.

As the region's population began to swell once again, it was fairly easy to bring abandoned or slightly damaged industrial facilities back into service, and with the loss of Texas and southern California to Mexico, the Northeast had no stiff competition in returning to its status as the nation's leading industrial area. The result of this has been that in 2300 the eastern seaboard is nearly one continuous metropolitan area. The Megalopolis that in the 20th century stretched from Boston to Washington, DC now reaches as far south as Norfolk, VA. Megalopolis also extends into the Midwest, through Albany, Buffalo, Pittsburgh, Cleveland, and Detroit, to Chicago, then north to Milwaukee and south to St. Louis. Population density in Megalopolis varies considerably throughout its length, but it includes no areas that could be considered rural by any stretch of the term.

Over 70 million people live within the boundaries of Megalopolis, nearly one-third of America's total population. The range of cultures encompassed is diverse, but a few dominant influences should be mentioned. Predominant, of course, are descendants of European origin, especially English and German. By 2300, most of these people have become so "Americanized" that they have nearly forgotten their original heritage. The Japanese influence is very strong throughout Megalopolis, not only in the Boston-New York region, where Japanese population has traditionally been high, but also in the most industrialized areas, where investments from Japanese corporations helped accelerate America's recovery. Black population is distributed throughout Megalopolis, but in very few areas is it collected into culturally distinct pockets. In general, blacks have been assimilated into the general American culture. Chicago and its environs hold a high percentage of Hispanics, primarily localized in culturally distinct neighborhoods. Many of the member cities of Megalopolis also have distinct Chinatowns, where Chinese populations are concentrated.

Rural areas of the American Northeast are largely devoted to dairy farms with mixed crop-raising through the region's southern reaches. Virtually all of the agriculture is owned and directed by major corporations which are themselves owned by larger conglomerates. There are a few localities where communal farms are operated by political or religious communes (such as the Amish) that have been in existence since the Twilight War or earlier, but these operate near a subsistence level and have little effect upon American society in general.

Midwest

Outside of the Midwest portion of Megalopolis, almost the entire Midwest region is devoted to extensive corporate farms. The American Midwest continues to enjoy the twin benefits of the most fertile soil in the world and nearly perfect climate for farming. Winters are cold enough to keep numbers of parasitic organisms very low, and summers are long enough and warm enough to provide an excellent growing season. With the addition of the best in bio-engineering technology, the Midwest remains central to America's ability to feed its population easily and with great variety, while still exporting foodstuffs to less fortunate nations. Primary agricultural products in this region are feed grains and livestock.

During the 20th century, the Midwest's high agricultural output was only possible by use of petroleum fuels, some obtained from the Midwest's own natural supplies, but most purchased from other regions of the world. With the advent of widespread solar power, dependence upon

foreign oil for fuel has become a thing of the past. Midwestern fossil fuels are being extracted much more than in the past, however, for use in the manufacture of plastics.

As with other regions of America, the scars of the Twilight War have largely been obliterated. The relatively few nuclear targets were primarily oil facilities, although a few military bases were hit as well. Long-term effects of these blasts were minimal. The population of the Midwest was largely rural at the time, and no major centers of population were targeted. By 2300, the rural population has shrunk even further, its only members being employees of the corporate farms, with a scattering of communal farmlands such as those mentioned in the Northeast.

South

The American South remains perhaps the most conservative area of the country, particularly in Florida, which was the center of New American influence after the Twilight War. But with the loss of Texas, the region has lost much of its political clout.

The South holds little in the manner of mineral resources, although there are some coal deposits in its western states and some iron, bauxite, copper, and zinc in the center of the region. Agriculture is important in the South, with livestock and specialty crops such as peanuts, rice, and some spices being raised. On a related note, tobacco crops have become nearly a thing of the past. Almost none of the American people smoke as a matter of course, and widespread sales of American tobacco to emerging nations no longer exists. Tobacco is still grown in very limited amounts as a luxury item for some of the very wealthy, among whom it is something of a fashion.

Population in the South is largely centered in Florida, which is almost as urbanized as Megalopolis, although nowhere near as widespread. Florida's extensive urban sprawl contains predominantly a mix of blacks and peoples of European descent. A large number of Puerto Rican and, especially, Cuban neighborhoods can be found as well. The southern coast of Louisiana, Mississippi, and Alabama is also very populous. Just after the Twilight War, with the loss of artificial control upon its course, the Mississippi River shifted its mouth approximately 200 kilometers to the west, entering the Gulf of Mexico near Morgan City, Louisiana. The old delta became largely salt marsh, and ground water for most of the cities south of Baton Rouge became contaminated with salt, forcing most of the population to leave. In 2300, this region has become heavily populated again, largely because of its easy access to the gulf. Large solar-powered desalinization plants supply fresh water for the populace. Morgan City has replaced New Orleans as the area's primary seaport, but the latter city remains a popular historical spot.

West

With the collapse of a central economy in America after the Twilight War, the nation's West suffered heavily. Rainfall increased in the states of Washington and Oregon, making crop-raising very difficult. In the meantime, much of California was stricken by drought. As in the rest of the nation, people fled from the cities into the country in search of food sources. As America began to recover in the 21st century, the population began to move back to the cities, and much of the country's western coast is now nearly as heavily populated as Megalopolis in the East.

Those Western states east of the Rocky Mountains found themselves effectively cut off from the rest of the nation just after the Twilight War, as long-distance transportation became virtually nonexistent. These people banded together into strong local units and worked to scratch crops from the arid lands they inhabited. Those communities that survived became fiercely independent, almost tribal; in a few cases they were centered around American Indians from the region's reservations. The Mormon Church also served as a unifying influence in Utah. As the nation recovered, cattle production became important to this region once again. In other regions of the country, as agricultural production geared up again, corporate America gathered up the reins and soon controlled it all. In these Western states, however, the agricultural corporations have experienced frustration time and again as the ranchers have banded together to keep them out. In the 24th century, there is a virtual economic war being waged in this region to determine who will control the ranges. Signs are that the corporations will eventually win—they simply have more resources to bring to bear—but it is a tribute to the independent ranchers that they have held out this long.

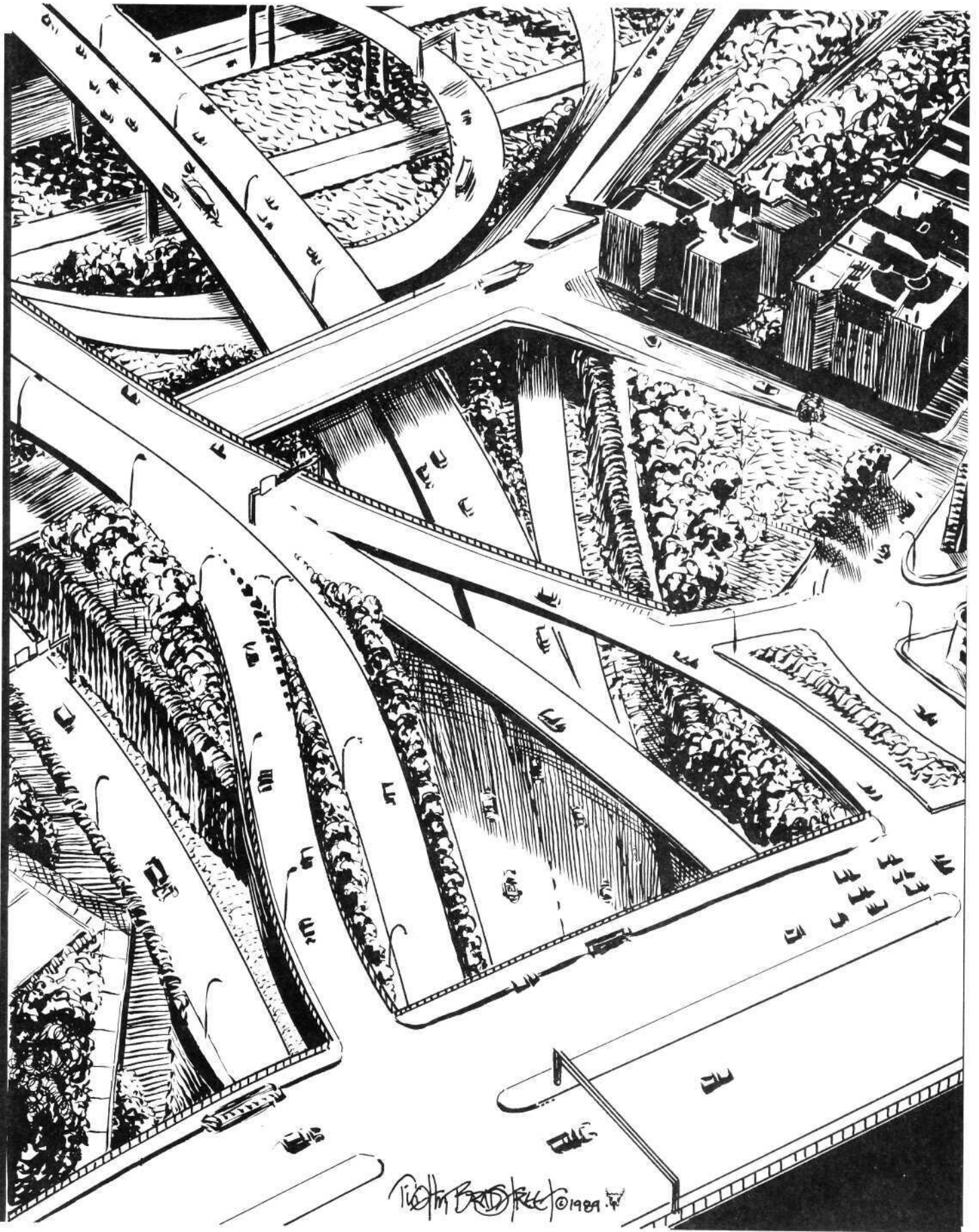
An industry in the West in which corporate America has had much more success is tourism. The Rocky Mountains, for example, abound with ski lodges, fishing camps, and the like, all owned by a few major corporations.

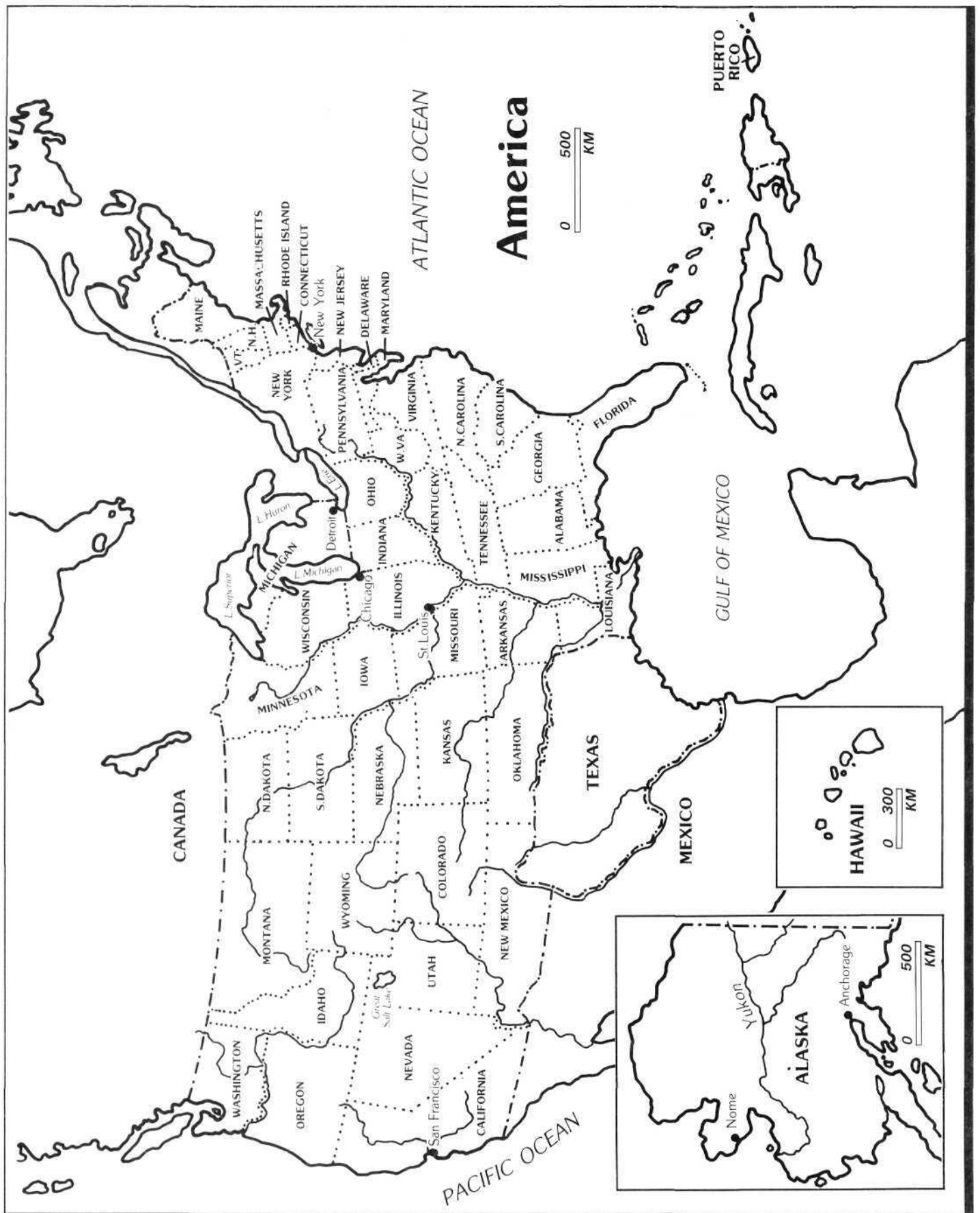
THE AMERICAN FLAG

Loathe to lose its self-image as the United States, America maintained 50 stars on its flag even after losing Texas, southern California, and most of New Mexico and Arizona to Mexico. Once it had been settled that after gaining its independence from Mexico, Texas would remain a sovereign nation, much political pressure was brought to bear on Puerto Rico to become a state and take Texas's place among the 50 stars. California, of course, remained an American state despite the loss of its southern end.

The northern regions of Arizona and New Mexico (including New Mexico's capital city, Santa Fe) remained in the possession of America, but the greatest portion of these two states had been assimilated into the Mexican states of Sonora and Chihuahua (and Texas also absorbed a good portion of Mexican-held Arizona). Mexican possession of these territories was a cause of continual friction between Mexico and America. The American people considered their country to still consist of 50 states, but it was obvious that Arizona and New Mexico were only shadows of their former selves.

Much of the tension was relieved in 2276, when Ellis joined the union as a state and New Mexico officially acquired what was left of Arizona, restoring New Mexico to nearly its original size. The name, Arizona, was stricken from the list of the states and Ellis's name was added. Once again, American citizens could consider their nation a cohesive union of 50 states.





Texas

TEXAN DEMOGRAPHICS

The population of Texas dropped drastically as a result of the Twilight War and the nation's subsequent battles with Mexico. By 2300, however, Texas' population has nearly reached 20th-century levels once again.

Population: 12,655,000
(78% urban, 22% rural) Literacy: 99% College Education: 77% Life Expectancy: 89.7 male, 93.4 female

Largest Cities:
Houston (2,350,000),
Dallas (2,077,000),
Galveston (1,850,000)

Texas in 2300 is something of a buffer state between a large and powerful America to its north and an expansionist Mexico to its south. But the pride of Texans is such that they do not view this as a dangerous niche to fill. Instead, they point out all of the opportunities it gives them to make a profit.

HISTORY

Texas was wrested from America by Mexico in 1999, at a time when America itself was involved in tremendous civil disorder. With America unable to hold onto its Southwest, Mexico annexed the areas and retained them, making them new Hispanic territories during the 21st century. However, in 2099, Texas rebelled against this rule, fighting for and winning its independence from Mexico, while at the same time avoiding political and economic domination by America. Texas won its independence in 2099, making it a separate nation for the first time since 1845.

Political strife and social pressures put a heavy strain on the new nation of Texas from its conception. Hispanic factions rallied to attempt to bring Texas back into the Mexican fold, occupying and terrorizing much of western Texas for decades. Oil men saw advantages in becoming an American state again and put political pressure on the new government. But even with these pressures, no one faction could get either a pro-Mexican or pro-American government into power, so Texas has remained independent to the present day.

A brief military coup was attempted by pro-Mexican radicals in 2230. Three hoverborne regiments seized access into and out of Austin, the capital, in an attempt to flush out and replace the government. In great Texan tradition, however, Austin's citizens took up arms and effectively eliminated the rebellion's army units before loyal troops could arrive. The Civilian Defense of Austin is celebrated every 23 March throughout Texas as an event which reinforces the individual's right to bear arms.

24TH-CENTURY TEXAS

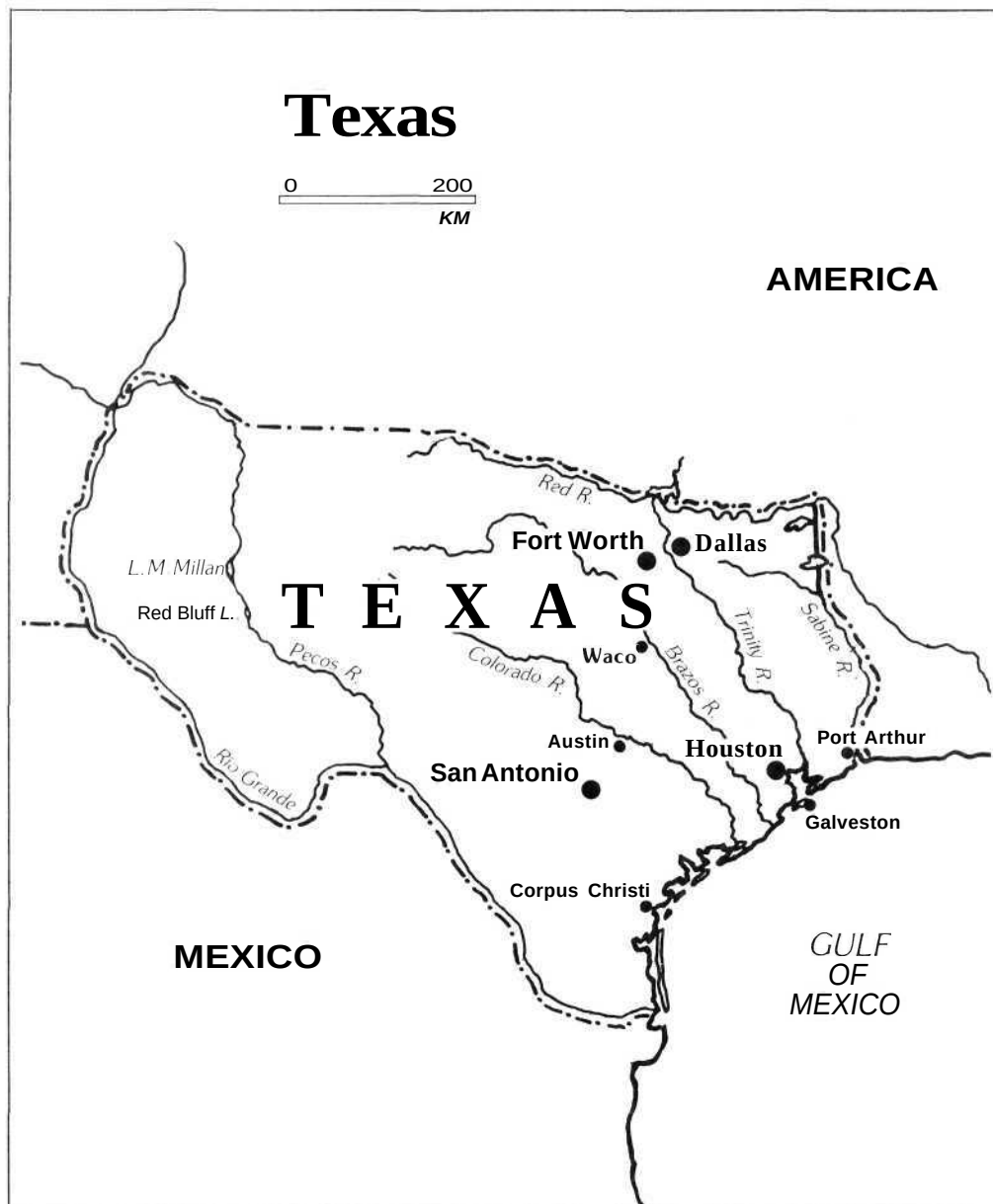
The Texas of 2300 is in many ways the same as it was in the days when it was an American state. The oil industry plays havoc with the whole country's economy, taking Texas' finances on a continuous roller coaster of good times and bad. The Eastern Seaboard is still fair agricultural land, and the West is still home to some traditional cattle ranches. However, these ranches are being put out of business by larger operations using automated herding techniques and long-term "harvesting" approaches to animal handling. The seaport of Galveston has become something of a boomtown—the gateway to Texan trade with the rest of the world, exporting oil and beef and importing necessities from South America and Africa.

Due to heavy influence from the Hispanic portion of the population and the many years of Mexican rule, Texan architecture has shifted from traditional Western skylines to flat, low-to-the-ground buildings geared to take advantage of as much solar energy as possible. Most homes are of a mock-adobe style, always at least passively solar, reducing necessary energy consumption on the national level. The energy figures listed in the sidebar do not reflect this abundant energy resource.

Texas' reach for the stars has been something of a lackluster effort on the part of previous governments to keep pace with other industrial powers. However, the country's own economy cannot really support a grand effort in space, and many Texans view continued expansion in space as a terrible long-term mistake. Present-day elections are very often won or lost over the issue of further expansion off-planet.

Citizens of Texas are among the most independent-minded people on Earth. Private ownership of land, home, transportation, and weapons is not only considered an inalienable right, but almost a responsibility. Texans own somewhat fewer of the most modern conveniences than do Americans, but they tend to be more mobile and are widely recognized as world travellers.

The small business person is the hero of Texan economy, much as was true of 20th-century



TEXAN ECONOMICS

The economy of Texas is generally strong, if somewhat chaotic. If the government can establish the means to moderate the effect of the oil industry on the overall economy, it is expected that economic growth will stabilize.

Industrial Capacity: 7
 Rudell Unit Agricultural Output: 95%, net importer of grain, net exporter of animal products
 Mineral Production: 100%, net exporter of oil
 Power Production: 70% (0% solar, 40% atomic, 60% mineral), net importer of power
 Principal Trading Partners: America, Brazil, Ukraine

American economy. Oil production is concentrated in the hands of a few major corporations, but cattle raising, farming, manufacturing, and service industries are all dominated by the multitudes of small businesses. Most of the Texan work force, therefore, either owns a small business or is employed by one.

Transportation systems for Texas are not nearly as developed as those for some other nations, such as America or many European nations, but they are effective, nonetheless. A heavy road network, built in the early 23rd century, links all major cities in Texas. Personal aircraft are uncommon, though many types of all-terrain vehicles are common in the arid western regions of the country. Both Houston and Dallas have state-owned space plane service to orbit, but both are also stopovers for American and Chinese space plane services. Texas has no state-owned heavy lift capacity, using either facilities in America or at Libreville-Gateway.

Texas holds two extrasolar colonies, one on DM-3 1123, and the other on Rho Eridani, as well as an enclave on 82 Eridani, the Eber homeworld. The independence of Texan citizens serves as an effective stimulus to emigrate from Earth.

Mexico

MEXICAN DEMOGRAPHICS

The population of 24th-century Mexico is two-thirds larger than it was during the 20th century. Much of this growth can be accounted for by the territorial gains it has made during the intervening centuries, but a substantial amount is simply the result of population growth.

Population: 124,247,000
(68% urban, 32% rural) Literacy: 96% College Education: 68% Life Expectancy: 89.5 male, 93.3 female

Largest Cities:

Mexico City (5,344,000),
Los Angeles (3,430,000),
San Salvador (2,754,000)

Mexico has made substantial gains in political stability and economic health since its early years as a Spanish colony. This has partly been the result of chance, as the Third World War ended world domination by the 20th-century superpowers and gave many Third World nations a chance to blossom. But much of Mexico's newfound success should be attributed to the decisive and insightful leaders who took advantage of that sudden change in world power relationships.

HISTORY

Mexico's poor economic health during the 20th century was not further depressed by the Third World War; therefore, the nation suddenly found itself in fairly good shape among the devastated countries around it. Most importantly, its northern neighbor, America, was particularly off balance, and Mexico took advantage of the fact, moving in on Texas in 1999 and the rest of the American Southwest in 2025. The taking of these new areas added greatly to Mexico's wealth, brought strong middle and upper middle classes into the social structure, and helped to solidify the army's place in establishing foreign policy.

In 2099, Texas rebelled against Mexican rule and managed to break free. American support to Texas is reputed to have turned the tide in the emergent nation's favor. However, another factor that worked against Mexico was that the Texan rebellion coincided with an important Mexican power play against Guatemala, which kept much of Mexico's armed forces tied up in the south.

The Mexican governments of the 22nd century were characterized by wily military leaders controlling foreign policy in a blatant campaign to topple the governments of Central American nations. A technique used successfully time and again was to appeal to the Hispanic roots of the target nation's populace, support the civil unrest this caused, and then send military units to seize the seat of power, ostensibly to aid in restoring order. The near-isolationist policies of America at the time prevented its intervention, leaving Mexico effectively free to do as it pleased in Central America. A list of the dates on which individual Central American nations fell to Mexico is as follows: Guatemala in 2103, Belize in 2105, Honduras in 2117, El Salvador in 2123, Nicaragua in 2140, Costa Rica in 2145, Cuba in 2148, and Panama (west of Panama City) in 2161. (Panama east of Panama City was occupied by Colombia to keep the canal from falling into Mexican hands, and the region officially became part of the Inca Republic when Colombia joined that union in 2284. By 2300, the canal itself had been widened and deepened and is occupied by an international committee.) Only in the cases of Nicaragua and Panama were military clashes necessary for Mexican domination. Each toppled country, in turn, immediately gained statehood in the United Mexican States.

The military rule of Mexico coincided with a similar military expansionist period in Argentina's history. The two nations together made plans to dominate Central and South America and to assert themselves as viable industrial nations in the 22nd century and beyond. Their first test came with the Alpha Centauri War (2162), which eventually led to the Melbourne Accords, vital to the further expansion of both Mexico and Argentina.

24TH-CENTURY MEXICO

Even in the 24th century, Mexico's national identity is best characterized by its military emphasis. Two years of national military service is required of all citizens, many of whom can expect to serve off-world in marine units or with Mexico's space navy. The military presence is so pervasive in Mexico that the nation can effectively be contrasted with Canada in regard to the subject of peace—the Mexican viewpoint is that the military is a valuable tool to be used as a means toward any end, no matter what that end might be.

Another element molding Mexico's national character is the collecting of many different Hispanic groups and cultures together. The intermixing of variant cultures and diverging ideas has been surprisingly well tolerated and encouraged by Mexico's various administrations. The results of this intermixing of cultures have been better overall education for all citizens and an easing of the

MEXICAN ECONOMICS

Mexico's economy is not as healthy as it might be, but it is improving. Enough gains have been made that, by the 24th century, Mexico has clearly left the ranks of the Third World countries and is well on its way to becoming an industrial nation.

Industrial Capacity: 12
Rudell Units
Agricultural Output: 78%, net importer of grain and animal products
Mineral Production: 76%, net importer of metals, net exporter of oil
Power Production: 700% (78% solar, 07o atomic, 22% mineral)
Principal Trading Partners: Argentina, Venezuela, Azania



political strife that would be expected from states absorbed into the union. For instance, El Salvadoreans are not only allowed to keep their national heritage and customs but are actively encouraged to share them with the general Mexican population. The federal government hopes this will build tolerance and harmony among the Mexican peoples, and thus far the tactic is working.

Unfortunately, the cost of a military society has cut deeply into the Mexican economy. Mexican citizens do not enjoy many of the advantages of 24th-century living that are available to more prosperous nations. Indeed, many still live in abject poverty in the slums around Mexico City and Los Angeles. Economic reform is sorely needed, and there are many social groups involved in pressing for such changes. However, actual revolution is something which is pretty much out of the question. Even those who are poverty-stricken are very much in love with their country, and most families can remember days which were not nearly as good as the present. Mexico has made a steady climb out of the so-called Third World, and its population appreciates that progress and supports the government that has brought it about.

RELIGION IN MEXICO

Religion in Mexico has been shifting steadily from Catholicism to Protestant denominations. In the 24th century, the nation's population is about equally divided between Catholics and Protestants. Considering the virtual monopoly that Catholicism once held over Mexico, this shift has surprised many.

One major factor in the shift has been economic pressure manifested in one way or another. For example, as Western goods found their way into the country, more and more Mexicans began to pursue them. Even among the poorest Indians, possession of a radio, for instance, began to be admired. This growing desire for material goods began to draw the populace from their satisfaction with subsistence farming to a mindset of upward mobility. With the ingrafting of Mexican-Americans from the American Southwest, this mindset took a firm hold.

Also, the Catholic stand against birth control served as impetus for the less devout to examine their beliefs more carefully. Finding in Protestant denominations doctrines that more fully matched their desires, many changed camps. By dint of their fragmentation, however, the Protestant denominations have been unable to match the great political power of Mexican Catholicism, and pressure is mounting upon the military government to pass laws that will ensure Catholicism's continued power and limit the growth of the Protestant groups.

Private Life

There are many similarities between the private lives of average Mexican citizens in the 24th century and those of average American citizens during the middle of the 20th. The average Mexican belongs to the country's large middle class. An adult male works 40 to 50 hours per week as a laborer in either the agricultural or manufacturing industries. He is typically married, owns a modest home or apartment, and supports a family consisting of himself, his wife, two to three children, and one or more of his or his wife's parents. An adult female is typically married and manages her home.

Education is state-sponsored for all citizens, but at higher levels there is much competition for the limited number of placements available. A substantial fraction of early education concerns itself with Mexico's various cultures, giving the youth a sense of tolerance for cultures other than their own.

Families in urban areas are about evenly split between those who own separate homes and those who own or rent an apartment or condominium. Transportation is by public bus or train, and entertainment consists of public concerts and sporting events, or cable-carried Tri-D programs in the home. Radio also plays an important part in the average Mexican's life, and like Tri-D and television, it is state-sponsored and state-controlled.

In rural regions, families tend to live in individual houses, with electricity and central plumbing, just as in the cities. Most families own a ground vehicle for transportation; typically it is an older model automobile or small hovercraft. Since it is very difficult to transmit and receive clear Tri-D signals without good, well calibrated equipment, television takes the place of Tri-D for rural families, and, of course, radio is very popular as well.

With the government emphasis on each citizen knowing and appreciating all Mexican cultures, many Mexicans are experiencing an awakening of curiosity and the urge to travel within their country. The increased health of the nation's economy gives them the wherewithal to do this, and their spending as tourists again contributes to the economy's health. Also, much of the effort of the mass media is directed toward encouraging consumer spending.

Work

As has been mentioned earlier, the typical Mexican works in either agriculture or the manufacturing industry. Farms are usually owned by small- to medium-sized companies, as are most other industries. The largest corporations are either state-owned or state-licensed and carefully monitored. Mexico has recognized the need to court foreign corporations, but it is careful that those corporations not gain undue power over Mexican resources.

Workers' unions had long been a tradition in many of the Central American countries that Mexico has acquired, and the Mexican government has done nothing to discourage this. But as with corporations, unions are by law effectively limited in size in order to prevent their competing with the militarist government for political power.

Transportation

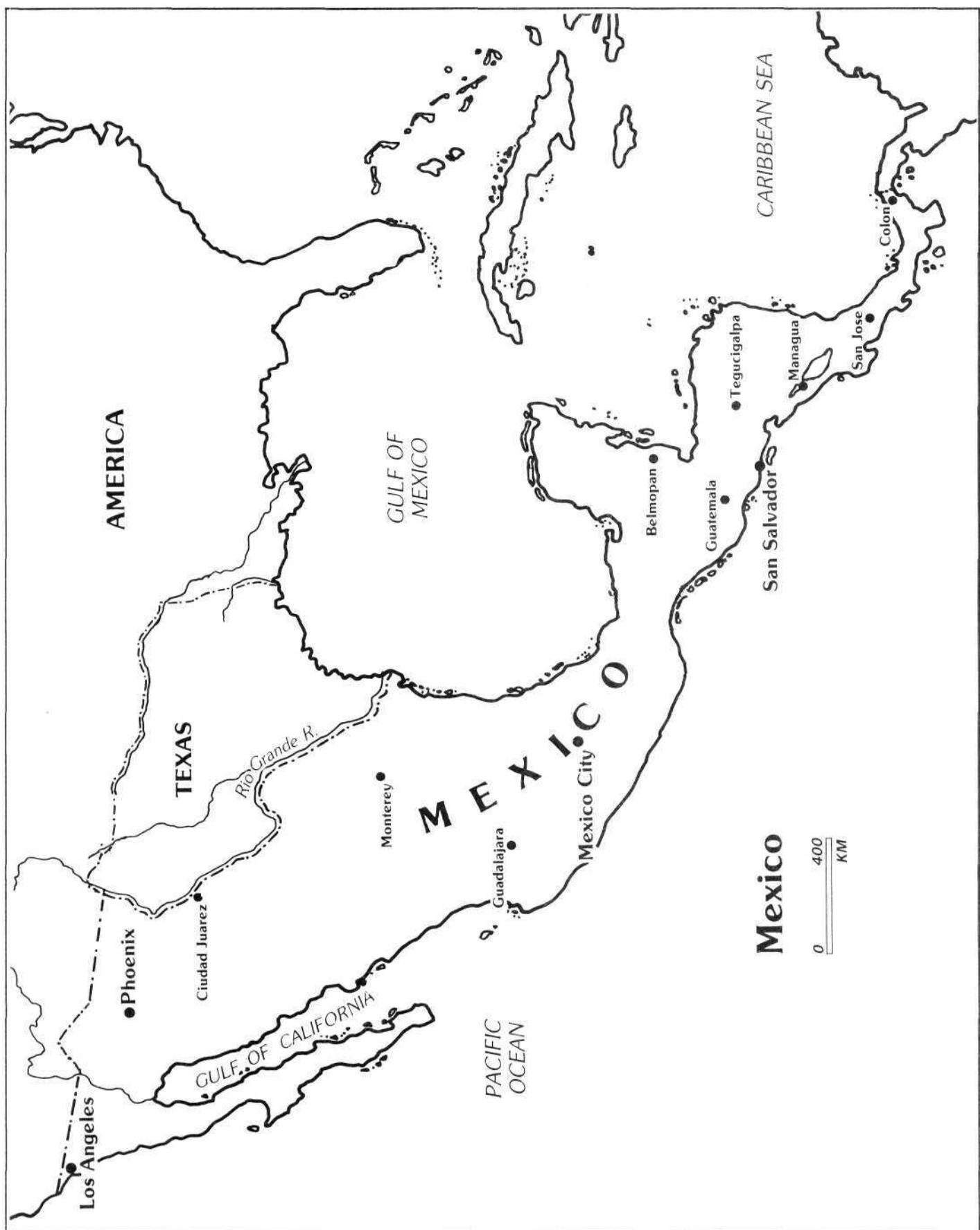
While there has been steady improvement of transportation systems in Mexico, much work remains before the country's transportation can be considered modern by any means.

Surface Transportation: Mexico suffers from an inadequate internal transportation net. A broad-reaching road system exists, but its outlying areas are in serious need of repairs. Standard railroad service between major cities exists, but the overall reliability of Mexican railways is standard compared to Texas, for example, and does not even approach the efficiency of America's airfilm lines.

Interface Transportation: Mexico City has interface space plane service, but only as stopover flights from America and Japan. Mexico's only state-owned interface capabilities are under military jurisdiction, located on the Yucatan Peninsula.

Colonization

Mexico's off-world possessions include a colony on Kwantung, where the newer Mexican colonists share the world with its older Manchurian settlers, and a very successful colony on Montana, in cooperation with Mexico's traditional Argentine allies. Both worlds are located in what has become popularly known as the Latin Finger of the Chinese Arm of stellar exploration.



Canada

CANADIAN DEMOGRAPHICS

Canada's low population growth and the impetus to emigrate to its colony world have combined to keep the country's population at a fairly stable level over the past several decades.

Population: 28,243,000
(76% urban, 24% rural)
Literacy: 700% College
Education: 98% Life Expectancy: 93.0 male, 97.6 female

Largest Cities:
Toronto (2,850,000),
Montreal (2,760,000),
Vancouver (2,367,000)

HISTORY

A close ally of America through the 20th century, Canada avoided much of the destruction of the Third World War and capitalized on its survival through the 21st century. It built up its own industrial base while America faltered, and then established itself for a time as the leader of North America, at least until America managed to get back on its political feet around the turn of the 22nd century.

By that time, Canada had become a mineralogical and agricultural treasure chest, and England was allowed to hold the keys. The trade relationship with England, at a time when England was terribly short of food and metals for its massive industrialization, made the North Atlantic an area of envy for the rest of the civilized world. Though Canada did perform trade with other nations, including Japan and China, its main trade partnership was with Mother England across the sea. At the same time, Canadian engineers worked side-by-side with Englishmen in the exploration and tapping of Greenland's metal and oil reserves during the middle years of the 22nd century.

Also at that time, England boasted the largest naval force on Earth, comprised of hydrofoil ships including aircraft carriers. This arm of diplomacy was put through maneuvers throughout the North Atlantic and always included elements of Canada's armed forces. When the disputed claims over Antarctic territories forced a confrontation between Argentina and England, the latter sent her navy south and took several Canadian units and ships with it. There was no shooting at the time, and the vastly outgunned Argentines backed down, but relations between the two nations have been strained over that matter ever since.

A national effort began in the 22nd century to make Canada the higher education center of the world. A tremendous effort was put into motion at that time to attract great thinkers to Canada to teach, to build facilities which would draw students from around the world, and to build a worldwide reputation for superb education and positive results. Canada correctly recognized the economic potential in being a leader in education. Other nations eventually began sending students to Canada, as a matter of national policy, not wanting to be left behind in the thinking of the age. By the end of the century, Canada had achieved its goal and remains the uncontested master of higher education on Earth.

Politically, the tendency for individual provinces to have far-reaching rights with regard to commerce and industry has fallen off. By no means has the Canadian government become heavily centralized, but it has stepped in and made some nationwide regulations designed to spur the economy and deter meddling between bickering provinces.

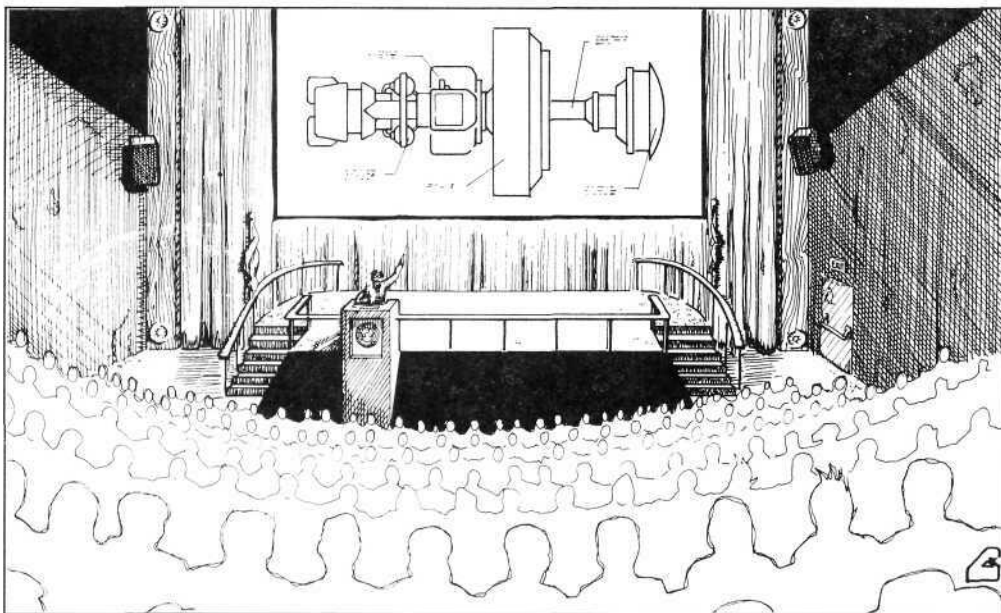
Canada's Northwest Territories yielded a tremendous find of petrochemicals in the 22nd century, turning the area into something of a boomtown. Cities were erected, and wells and pipelines built. However, as the worldwide need for oil products declined over the next century, the region has cut back production drastically, and the entire deserted area remains something of an embarrassment to the Canadian people.

A latecomer to the interstellar space race, Canada didn't even launch its first stutterwarp-capable ship until 2290. It established outposts on DM + 19 5116 and DM + 15 4733 and established its first colony world, Doris, in the DM+ 20 5046 system in 2273. That area of space has, in fact, become known as the Canadian Finger. The colonization of Doris is a national imperative, according to the government. With the help of the frontier spirit which still lives on in western Canada, the migration effort to Doris has been quite successful.

The Canadians have also established an enclave on the Sung homeworld.

24TH-CENTURY CANADA

As the champions of advanced education and so-called liberal thinking, the Canadians have obtained for themselves a unique and interesting national character. Canadians, for the most part, view themselves and their state as the main proponents of world peace and ecological safety.



Canada is one of the greatest supporters of the North American Research League, members and administrators of which have close ties to the universities and national government of Canada.

Universities in Canada

The incredible quality of the fine universities in Canada makes any of them an excellent choice for a well rounded education, balanced in the arts and sciences. However, every university has departments which it and the world feel to be superior, perhaps even the best in all of human space.

University of Western Ontario, London, Ontario: Doctor Reginald Upland coordinates UWO's Extraterrestrial Human Civilizations department, which studies the changing social behavior of communities not tied to the fundamentals of Terran living. The department has branches on most colony worlds and on some outposts (notably on DM + 15 4733 and DM + 27 28217, the latter being the site of the recent Intleman experiments). Students from the university in London are mainly concerned with research, though most eventually travel off-world for at least a semester to perform field work. UWO has recently been consulted by both Brazil and Argentina about their newer off-world possessions.

University of Toronto, Toronto, Ontario: The material sciences labs at the University of Toronto were the first to make sufficient breakthroughs into biocarb filaments and later into the materials which made the beanstalk a reality. The university site in Toronto is merely a site for pure research, however; actual development of materials takes place at private industrial plants all over Canada and America.

University of Ottawa, Ottawa, Ontario: U of O supports tremendously the efforts of Dr. Richard Lingstrom and his theoretical sciences department. In fact, in a university-wide referendum, the student population (few of whom are actually in the theoretical sciences department) turned down funding for a new sporting arena in favor of a new building complex for theo-sci. In the last century the department was heavily involved in the development of faster-than-light travel and the improvements of such designs.

University of Montreal, Montreal, Quebec: Closely tied with the University of Heidelberg, the University of Montreal's Artificial Intelligence Department is on the cutting edge of technology. Prototypes in the lab now are calculated to be approaching applicable intelligence levels.

University of British Columbia, Vancouver, British Columbia: A solid school of engineering, the U of BC is highly regarded the world over. Many current aerospace designs and starship plans were originally drawn up by design teams at the university. The university is also contracted by the Canadian government for engineering consulting with regard to the problems of colonizing a new world, namely Doris.

CANADIAN ECONOMICS

Canada's economic state is very good. The nation seems quite content to buy and sell with its traditional trade partners and is not aggressively trying to capture new markets from other nations. The result of this is that Canada is perceived as having no enemies. Competition from developing nations who would seek to capture Canada's markets keeps the quiet North American country's business practices well honed.

Industrial Capacity: 2
 Rudell Units
 Agricultural Output: 106%, net exporter of grain
 Mineral Production: 104%, net exporter of metals and radioactives
 Power Production: 80% (50% solar, 45% atomic, 5% mineral), net importer of power
 Principal Trading Partners: America, Great Britain, France, Japan

THE INTLEMAN EXPERIMENTS

It is common knowledge that humans must have some sort of "gravity" in their environment in order to maintain bone and muscle mass. This is the reason for spin habitats on deep-space vessels and zero-G outposts. But even the zero-G portions of such vessels and outposts tend to be designed so that one surface is the dominant or "down" surface, and people tend to align themselves to match this distinction.

In 2299, Dr. Wilson T. Intleman, of the University of Ontario, proposed a group of experiments to study the long-term psychological effects of zero-G architecture built with no dominant "down" direction, architecture in which every surface serves equally as "floor. " In this architecture, all surfaces are used equally, and the human eye has no clue by which to align the body. To limit the effect of spin habitat "gravity" upon the mind, even the spun portions of the outpost were to be constructed so that they could be rotated every few days, making each surface serve as floor for a period of time.

The French outpost at DM+ 27 28217 was chosen as the first site for the conducting of the Intleman experiments.

Work

Canada's level of actual employment is rather high for the industrial nations of Earth, with remarkably few people on public welfare. The timber industry is the chief employer in the West, oil drilling and refining in the North (though this has dwindled greatly from its heyday), agriculture in the Midlands, and education and government in the populous southern portions of Quebec and Ontario. So much of the population is productive, in fact, that standard measures of Canada's economic health belie its strength.

The colonization of Doris has been a move which has done much to change the face of Canada. Activities along the so-called Canadian Finger of space are eternally front page news, of more interest to earthly Canadians sometimes than they are to those on the Finger. There is a sense of pride among the Canadians that they are now out in the forefront with other nations of Earth, even though they had a very slow start in space.

The initial wave of settlement from Canada was from companies wishing to send their employees out to form new branches. The particulars would vary, but the goals were essentially the same. A family would be offered a tremendous bonus to at least attempt to relocate to Doris and stay there for a set number of years. The bonuses would increase the longer the family would stay there with at least one member working in the new branch of the company. At its height, this method of recruitment was convincing 50 families a week to emigrate out of Canada. The universities were geared up by industry to help families to *prepare* for their new environment.

Now the government is stepping in with enormous tax incentives to people wishing to relocate. The administration is no longer concerned that there be growing services on the frontier, but now wishes there to be an increasing general population. The effect on the Earthbound Canadian population at large has been extremely favorable, and families and individuals from a broad spectrum of society are taking advantage of the incentives. In fact, so many people are on the move that there is a shortage of skilled people quickly developing in much of Canada.

...all-terrain vehicles are common in remote regions...

Transportation

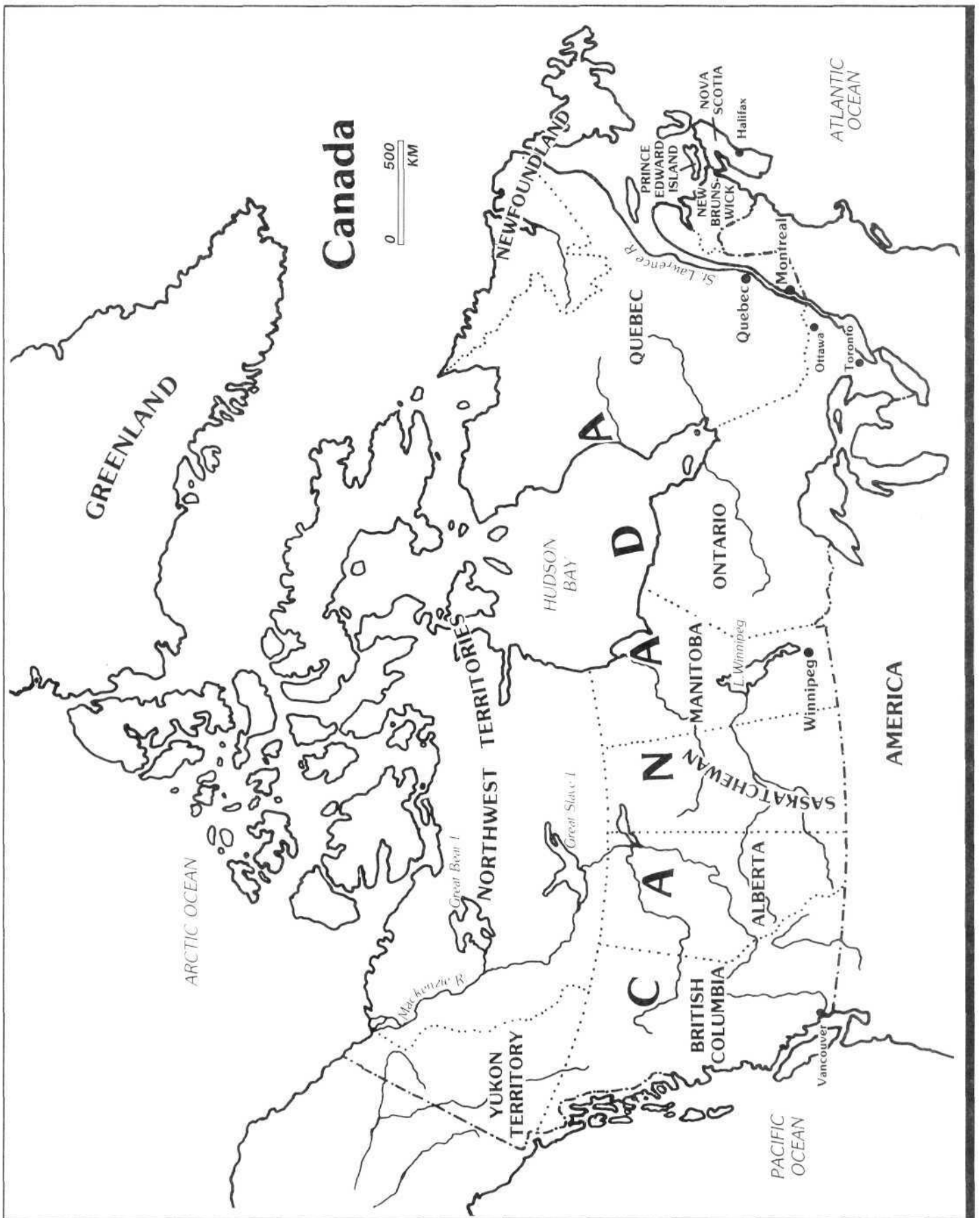
As a nation that, compared to other portions of the Earth, has a small population and a very large landmass, Canada has very special transportation needs.

Surface Transportation: Although most of the nation's population is concentrated along the Canadian-American border to take advantage of warmer temperatures, many of the nation's people live in more remote areas, close to the natural resources that they harvest. Heavy snowfall during much of the year makes ground transportation difficult. To provide transportation for its citizens, Canada has developed an extensive road network and standard rail net that crisscross the country, reaching from the populous southern cities up into the rich oil fields of the Northwest Territories. Airfilm lines have been established between Montreal and Toronto and between Toronto and Ottawa. Individual aircraft and all-terrain vehicles are commonplace in remote regions of Canada.

Interface Transportation: Toronto and Ottawa have space plane service to orbit. Edmonton has the nation's catapult monopoly, and Vancouver is the launch site of the Canadian national shuttle system, established in 2249.

Colonization

It is generally agreed that the intentions for the future are to establish Doris as the base from which further space colonization is performed. Obviously, the shots will be called from Ottawa, but the bulk of the effort will have to be dealt with from Doris. There are no plans for new colony worlds immediately, but it is generally agreed that Doris will take many more years before it can be considered fully utilized. Directing public opinion to take into account such large expanses of time is a major concern of government/population relations.



South America

ARGENTINE DEMOGRAPHICS

Argentina has approximately one-fifth the population of Brazil, its chief economic rival.

Population: 67,073,000
(83% urban, 17% rural) Literacy: 97% College Education: 72% Life Expectancy: 95.8 male, 100.1 female
Largest Cities:

Buenos Aires (29,031,000),
Rosario (2,184,000),
Cordoba (2,140,000)

ARGENTINE ECONOMICS

Argentina is, economically, the most powerful nation in Latin America.

Industrial Capacity: 7
Rudell Units Agricultural Output: 106%, net exporter of grain, net exporter of animal products Mineral Production: 66%, net importer of metals, net importer of oil Power Production: 113% (97% solar, 1 % atomic, 2% mineral), net exporter of power Principal Trading Partners: Mexico, Chile, America

As was the case with Mexico, South America suffered less from the Twilight War than did more industrialized areas of the Earth. The collapse of the world economy meant that the economies of individual South American nations were thrown into chaos as well. But since these nations had a higher percentage of their populations working in agriculture, it was somewhat easier for them to avoid the widespread famine and plague that occurred in other areas of the world. And after a relatively short period of economic readjustment, these nations found themselves with essentially the same industrial capacity as they had had before the war, but without the domination of the superpowers.

Being rich in natural resources, but with those resources widely scattered, South America could have become an economic microcosm in itself—the natural resources that one nation lacked being traded for those that another needed. To some extent, this is exactly what happened. But Argentina and Brazil both fought for economic dominance, and outside nations such as Japan and France worked to ensure that their own interests on the continent would be furthered.

The end result has been a succession of wars, the three Rio Plata Wars, primarily between Brazil and Argentina, but with other South American and non-South American nations playing parts as well. National borders have shifted as a result of these wars, and (with the merging of old Guyana, Surinam, and French Guinea into one nation, strictly for economic reasons) South America is now divided into nine countries, as opposed to the 14 that existed just before World War III.

ARGENTINA

Argentina arguably has the strongest economy of any Latin American nation. Mexico, Argentina's closest ally, is improving steadily in this respect, but did not have the advantages that Argentina had before the Twilight War, advantages that effectively gave Argentina a head start in the 21st century. Brazil, Argentina's greatest rival, has an economy that is nearly as strong, but it is presently on the decline, while Argentina's is steadily improving.

An early trade agreement with Chile supplied much of the mineral resources that Argentina needed for its growth, and agreements with Mexico helped to give Argentina added political clout among the other Hispanic nations of South America. Argentina also benefits from a geography and climate that have made transportation and agricultural development easier than in other areas of the continent where steep mountains or dense jungle impede both travel and planting. The predominance of people of European descent in Argentina's population has made industrialization comparatively easy, as these people have long had a tradition of the importance of education, making them well prepared for the use of modern technology.

Argentina in the 24th century is a nation nearly as urbane as the most polished countries of Europe. The country's population is primarily urban, and the average income is quite high by world standards. A long tradition of democratic government has kept the nation politically very stable, which makes it a favorite spot for foreign investment, and branches of many of the world's largest corporations can be found here.

The best that technology has to offer can be found in Argentina's cities. The average citizen works either in one of Argentina's very modern factories or in a service industry of some sort, with banking playing a very large role in this area. Transportation is provided by modern rail lines (very few Argentines own a private vehicle—there is simply no need for them). Entertainment is provided both by government-sponsored businesses and by private companies. Competition in this field is encouraged by laws friendly to independent businesses.

In the rural regions, agricultural corporations employ the most modern methods in raising crops or herding Argentina's famous beef cattle. A few of Argentina's traditional gauchos can still be found working on corporate ranches. For them, it seems that things have changed very little over the last three centuries.

Transportation in Argentina is probably the most modern on the South American continent. Extensive rail nets not only link the major cities but also reach deep into the rural areas, connecting

the corporate farms to Argentina's eastern coast. The nation's air routes are also very extensive, linking city to city and travelling to foreign cities as well. Much of Argentina's orbital cargo goes through Libreville's beanstalk, but Argentina also has a shuttle system established at Buenos Aires.

Argentina encourages tourism from other countries, and many Argentines also find opportunity for world travel. Argentina also encourages its citizens to emigrate to its two colonies, particularly to the one at Omicron2 Eridani, and plans are under way to establish other Argentine colonies among the stars.

BOLIVIA

In contrast to Argentina, 24th-century Bolivia is one of South America's poorest nations, but it has made some slight progress over the centuries by a combination of continual government efforts to educate the populace, development of rich mineral resources, and judicious alliances of convenience.

The majority of Bolivia's population is of American Indian heritage; over 50 percent is pure American Indian, in excess of 35 percent is mestizo, and barely 10 percent is of European descent. Traditionally, the Indian population has been content to live at a subsistence level, and because of this, Bolivia has had considerable difficulty in developing a national economy, let alone joining into the world economy. Continual efforts to teach the rural population the importance of agricultural production in excess of individual need have slowly paid off, allowing Bolivia's urbanized areas to gradually increase in size and sophistication over the centuries.

Along with this progress toward a more urban society, Bolivia has also been able to slowly increase its mining of minerals, particularly metal ores, and it is now one of the prime Terran sources for these ores. Most of Terra's need for ores must be supplied from sources on its colony worlds, and the distances involved in transporting such ores, as well as the expense of getting them to and from orbit and through Earth's Orbital Quarantine Command, makes Bolivian ores very inexpensive in comparison. But with the wisdom of a nation long at the bottom of the heap, Bolivia is developing its mineral resources patiently and relatively slowly, hoarding them until it has made the economic gains it desires, rather than plundering them and leaving nothing for the future.

Bolivia has been canny in its choice of allies during the course of South America's history, as well. In particular, during the Second Rio Plata War, Bolivia allied with Brazil (who had occupied parts of Bolivia during the First Rio Plata War), and in so doing, gained a land route to the Pacific (the Arica corridor from Chilean territory), ending the nation's status as a landlocked country. It would have been expected by some that Bolivia would ally with Brazil during the Third Rio Plata War as well, but sensing a change in fortunes, Bolivia risked Brazil's ire by allying with Argentina and the Inca Republic. In so doing, Bolivia gained Argentina's support in keeping the Arica corridor, despite the fact that the territory had originally belonged to Argentina's close ally, Chile.

But conditions remain primitive in many of Bolivia's rural reaches, and it is actually possible for a person to lose himself from the world's view in these areas.

Twenty-fourth century Bolivia is a country in the midst of change. Under the pressure of world opinion, the nation has become nominally democratic, although the military maintains close control of political reins of power. Education among the populace is increasing, and a national competition is conducted each year to determine who among the nation's brightest youth will gain the opportunity for state-sponsored scholarships to Canadian colleges. Road nets are continually being upgraded to improve transportation, and electronic goods are being fed to even the most rural locations to create a hunger for progress. But conditions remain primitive in many of Bolivia's rural reaches, and it is actually possible for a person to lose himself from the world's view in these areas. For this reason, it is rumored that some of the Earth's ultra-wealthy individuals maintain homes in the remote regions of Bolivia.

BOLIVIAN DEMOGRAPHICS

With a largely traditional Indian population, Bolivia faces a challenge in its efforts to industrialize.

Population: 20,864,000
(51% urban, 49% rural) Literacy: 65% College Education: 12% Life Expectancy: 79.4 male, 83.3 female

Largest Cities:
La Paz (2,620,000),
Santa Cruz (1,024,000),
Cochabamba (816,000)

BOLIVIAN ECONOMICS

Bolivia's economic condition leaves much to be desired, but it is improving.

Industrial Capacity: 2 Rudell Units
Agricultural Output: 72%, net importer of grain
Mineral Production: 119%, net exporter of metals
Power Production: 95% (80% solar, 3% atomic, 17% mineral), net importer of power
Principal Trading Partners: Brazil, Argentina, United Kingdom

BRAZILIAN DEMOGRAPHICS

Brazil has roughly five times the population of Argentina, its historical rival in power.

Population: 373,000,000
(58% urban, 42% rural)
Literacy: 95% College
Education: 82% Life Expectancy: 92.5 male, 97.2 female

Largest Cities:
Sao Paulo (33,630,000),
Rio de Janeiro
(21,580,000),
Belo Horizonte (7,430,000)

BRAZILIAN ECONOMICS

Brazil's many resources, not the least of which is its large population, makes it one of Latin America's two most powerful nations.

Industrial Capacity: 37
Rudell Units Agricultural
Output: 111%, net exporter
of grain, net exporter of
animal products Mineral Production: 98%, net exporter
of iron ore, net importer of
oil Power Production: 108%
(91% solar, 0% atomic, 9% mineral), net exporter of
power Principal Trading
Partners: Japan, French
Africa

CHILEAN DEMOGRAPHICS

Chile has slightly more than half the population of Argentina, its closest ally.

Population: 37,975,000
(74% urban, 26% rural) Literacy: 94% College Education: 67% Life Expectancy: 96.8 male, 102.7 female

Largest Cities:
Santiago (14,768,000),
Valparaiso (2,445,000),
Concepcion (2,052,000)

BRAZIL

Like Argentina, Brazil was well on its way to becoming an industrial nation before the Twilight War, and this gave the country a head start over other Third World nations as they expanded to fill the economic vacuum caused by the fall of the superpowers. Also like Argentina, Brazil had a large landmass with many different resources available, and a predominantly European population, which made assimilating industrialization easier than for those nations with predominantly American Indian populations. But Brazil had some disadvantages that Argentina did not, and given these disadvantages, it is remarkable that the nation was able to become the power that it is. Even though Brazil's economic standing is on the wane, it is important to remember that it stands almost equal to Argentina even today, as one of the two most powerful countries in all of Latin America.

During the 21st century, Brazil had the advantage of heavy investments by Japan and several European nations (most notably France), who viewed the country as an excellent source of cheap labor. Vying with Argentina for the markets of South America, Brazil also received some aid indirectly from these nations during the First Rio Plata War of 2203 to 2307. But Brazil had one overwhelming disadvantage in its conflict with Argentina, and that disadvantage told in the end. While Argentina held a common Hispanic heritage with the vast majority of Latin American countries, Brazil's roots were in Portuguese soil. This caused not only a language problem for Brazil, but more importantly a cultural barrier. Argentina was able to call on its Hispanic cousins, and with the aid of Chile and Mexico was able to effectively break Brazilian power over many smaller South American countries, in particular inciting the formation of the Inca Republic from Brazilian-dominated Peru and Ecuador (a republic that Colombia joined shortly thereafter).

Also, while Argentina benefits from a more southerly setting, and therefore has large regions of grasslands for cattle grazing and much readily cultivable area, Brazil is nearer the equator and is largely covered by the Amazon rain forest, a region difficult to exploit effectively. Many types of valuable trees exist in this rain forest, but they are so intermixed that there is no effective way of harvesting them. Even if the land is cleared, the soil is too leached for effective farming, and the rainfall is not suitable for most types of crops. Also, world opinion opposes clearing of the Amazon rain forest because of its importance in worldwide ecology.

Faced with these problems, Brazil has nonetheless managed very admirably in becoming an industrial power and in holding the *greater part* of that power even when attacked economically and militarily by the majority of Latin America. Brazil does not seem to be overtly imperialistic—it has never shown signs of wishing to extend its borders (although in the past it has occupied several of its neighboring nations to serve as buffer states between itself and Argentina). Brazil's present strategy seems to be to continue developing its own potential, to work toward establishing off-world colonies, and to diminish the dominance of Argentina and Mexico by pointing out the inequities in the administration of their creation, the Inca Republic.

Brazil still has a few Indian tribes living in the depths of the Amazon rain forest, although most of its original tribes dwell near the headwaters, which are now part of the Inca Republic. The majority of the nation's citizens live near the east coast, however, with about 60 percent in the cities and the rest on rural farms or plantations. People on these farms and plantations still live much the way they did three centuries ago, share-cropping for owners in the cities. However, where once these owners were simply wealthy individuals, they are now businesses, usually branch offices of larger Brazilian corporations. City dwellers enjoy a life very much like that of a North American or European, living in a rented apartment and working set hours in manufacturing, banking, or information-processing firms. A healthy fraction of Brazil's population also works in the tourist trade. Faced with pressure to maintain the Amazon basin in its natural state, Brazil has invested heavily in building beautiful resort areas along the river and is aggressively courting foreign tourists, even advertising among the major cities located on colony worlds.

Transportation within and between Brazil's cities is very modern, relying primarily upon air-film lines. Rural regions still rely upon a road network; although the major routes are suited for hydrogen vehicles, the secondary routes are often gravel or dirt roads. Brazil's major cities are all serviced by air links to other cities of the world. Most of Brazil's cargo transportation to orbit is handled through its own catapult outside of Rio de Janeiro, and the nation also has space plane service to orbit from that city and from Sao Paulo as well.

CHILE

Chile in the 24th century is primarily a very junior partner in an alliance with Argentina. Although it stretches approximately half the length of the continent, Chile is so narrow that it is actually one of the smaller South American nations.

Chile's northern portion is comprised primarily of the Atacama desert, a region historically rich in mineral wealth and still producing well into the 24th century, although estimates are that it will be depleted before the turning of the next. It is from this region that Bolivia received a strip of land leading to the Pacific, and although Chile chafes at the loss of that territory, Argentine pressure has prevented Chile from attempting to regain it by force.

The majority of Chile's people dwell in the central portion of the country, a region of hot summers and cool winters. The Chileans are primarily a mixture of Spanish and Indian stock, and they are very proud of the distinctive heritage that has arisen as the two cultures have mixed. Long ruled by military dictatorship, by the 24th century Chile has become a model of representative democracy often cited as an example to developing nations. Because of this distinction, Chilean statesmen are famed throughout the world and are often sought as arbiters in disputes among other nations.

The southern portion of Chile is a land of cold winters and deep, majestic fjords. Relatively few people live in this region, although by 2300 it has become something of a favorite spot for writers and musicians from around the world.

Transportation within Chile is primarily by road, although major cities are linked by rail and air. Transportation to other areas of the world and to orbit is handled through Argentina's aerospace facilities.

GUYANA

A part of the French Empire, the nation of Guyana consists of a federation of three very different states: Little Guyana, Surinam, and French Guinea.

Little Guyana, as it is called to distinguish it from the federation, was a British territory from 1814 to 1966 which afterwards gained its independence. The dominant populations in this state are Asians and Africans, and even into the 24th century there is much political conflict between these two groups. The majority of Little Guyana is covered by forest, and only the coast is well settled, although life there is relatively modern, approximately at the level of Mexico, as it is in Little Guyana's sister states as well.

Surinam, the middle state of the federation, has about half the population of Little Guyana, and Asians and Africans are only minorities in this population, the dominant groups being Creoles (mixed European and African stock) and American Indians. Geographically, Surinam is very similar to Little Guyana, but it has fairly large deposits of bauxite still producing in the 24th century. Surinam was contested by the British and Dutch during the 17th century before eventually being ceded to the Dutch, who named it Dutch Guinea. The state gained its independence from Holland in 1975 and took the name of Surinam at that time.

French Guinea is the third of the states comprising Guyana. Its population is approximately one-tenth and its size roughly half that of Little Guyana. The overwhelming majority of the population consists of Creoles, with somewhere near 15 percent being of Indian descent. French Guinea was originally a French penal colony. Its economy was based primarily on industries of timber, fishing, rum, and some mining of gold and bauxite, as well as the operation of a space center during the 20th century. The construction of a French orbital catapult in 2102 made travel to orbit its primary industry during the 22nd century, and many South American nations still depend upon its services even into the 24th.

With the building of this catapult, Surinam and Little Guyana soon became involved in support services, and the three nations were joined into one republic in 2130. Life in the combined nation has improved steadily since that point, with cross-culturization between the three states and jointly run self-modernizing projects. In 2300, the nation's coastal cities are all connected by airfilm train routes, and hydrogen roads reach through the agricultural regions behind them, but the heavily forested interior of the nation is still largely undeveloped. With its orbital catapult, Guyana is something of an international business place for Latin America, although nowhere near the scale or sophistication of Libreville. But then again, Guyana does not have Libreville's extensive slums either.

CHILEAN ECONOMICS

Chile's economy is good compared to those of most Latin American nations.

Industrial Capacity: 3.5 Rudell Units
Agricultural Output: 92%, net importer of grain
Mineral Production: 99%, net importer of petroleum, net exporter of iron
Power Production: 102% (98% solar, 0% atomic, 2% mineral), net exporter of power
Principal Trading Partners: Argentina, America, Japan

GUYANAN DEMOGRAPHICS

With only slightly more than 6,000,000 people, Guyana is one of South America's least populous nations.

Population: 6,415,000 (76% urban, 24% rural)
Literacy: 92%
College Education: 68%
Life Expectancy: 94.2 male, 97.7 female

Largest Cities:
Cayenne (1,080,000),
Georgetown (732,000),
Paramaribo (608,000)

GUYANAN ECONOMICS

The Guyanan economy is largely tied to the French space facilities located in the country.

Industrial Capacity: 0.5 Rudell Unit
Agricultural Output: 82%, net importer of grain, net exporter of sugar and marine food products
Mineral Production: 95%, net exporter of aluminum, net importer of petroleum
Power Production: 83% (92% solar, 4% atomic, 4% mineral), net importer of power
Principal Trading Partners: France, Brazil, Argentina

INCA REPUBLICAN DEMOGRAPHICS

The Inca Republic has roughly two-fifths the population of Brazil, ranking it as the number-two South American nation in terms of population.

Population: 127,957,000
(63% urban, 37% rural) Literacy: 57% College Education: 72% Life Expectancy: 63.6 male, 68.2 female

Largest Cities:
Bogota (10,344,000).
Lima (7,263,000),
Medellin (3,893,000)

INCA REPUBLICAN ECONOMICS

The Inca Republic's economy is one of the worst on the South American continent.

Industrial Capacity: 7
Rudell Units Agricultural Output: 99%, net exporter of sugar and coffee Mineral Production: 87%, net importer of machinery and Pharmaceuticals Power Production: 83% (95% solar, 3% atomic, 2% mineral), net importer of power Principal Trading Partners: Argentina, Mexico, Venezuela

PARAGUAYAN DEMOGRAPHICS

Paraguay's passive role in world affairs allows its citizenry an idyllic lifestyle.

Population: 10,112,000
(66% urban, 34% rural) Literacy: 61% College Education: 73% Life Expectancy: 65.6 male, 69.2 female

Largest Cities:
Asuncion (926,000)

THE INCA REPUBLIC

The Inca Republic in its present form as a nation has only existed for 25 years. It was established in 2275 with the merging of Peru and Ecuador. Nine years later, in 2284, Colombia joined the union as well. Created by anti-Brazilian groups with the backing of Argentina and Mexico, the Inca Republic is an embarrassment to its allies—a prime example of economic mismanagement and human rights violations.

The Inca Republic is a...prime example of economic mismanagement and human rights violations.

Peru and Ecuador are both located in the region originally held by South America's ancient Inca Indians. After the period from 1531 to 1533, when Spain conquered the Inca empire, the two were established as Spanish colonies. Peru declared its independence from Spain in 1821 and Ecuador in 1822. Both suffered under a series of weak civilian governments and military juntas during the rest of the 19th century and throughout most of the 20th, but each gained a promising democratic government approximately 20 years before the Twilight War.

The collapse of the world economy proved too much for the two emerging nations, and both fell under Brazilian domination during the bulk of the 21st and 22nd centuries. Throughout this time, the two bickered regularly over where their mutual border belonged,

Argentina and Mexico viewed Peru and Ecuador as weak links in Brazil's structure of economic and political power, and they encouraged revolt in the two countries, appealing first to the Hispanic culture they held in common with the rest of Latin America (but not with Portuguese-descended Brazil), and finally to the Inca heritage the two nations held in common with one another. This was the spark that began the creation of the Inca Republic. Colombia, seeking to become more than a second-rate South American nation, joined with the two nearly 10 years later, citing a common Inca heritage, despite the fact that its population is predominately mixed European and Indian rather than pure Indian.

The area included in the Inca Republic is very rich in many minerals, but because of the nation's history of political instability, few of them have been exploited. As one of the newest nations on the globe, the Inca Republic is still in its political infancy, and although ostensibly a democracy, in actuality it is dominated by a junta of the original leaders of the seven Brazilian resistance groups. The actions taken by this council in its attempts to retain power are often denounced as barbaric by other nations, and in defense, the Inca Republic has effectively closed its borders to most foreigners, even restricting access by agents of Argentina and Mexico.

Life for citizens of the Inca Republic is more primitive than nearly anywhere else on Earth. Transportation, when available, is largely by ground vehicle on gravel and dirt roads, although cities are interconnected by paved roads and conventional railroad, with some air travel available for government use. Nearly one-third of the population still works at agriculture, a figure that is extremely high for 24th-century Earth. The other two-thirds work at relatively primitive manufacturing, mining, fishing, or in government and the military.

The government of the Inca Republic is working to improve the lot of its citizenry, but it is almost paranoid in its rejection of outside assistance, jealously guarding its own sovereignty. It is hoped that with the passage of time, the nation will become fully integrated into world society.

PARAGUAY

Paraguay is a landlocked nation located between Argentina, Brazil, and Bolivia. Its western region is dominated by marsh and scrubland; its eastern region consists largely of fertile plain and hills. The Paraguay River divides the regions from each other. Three-quarters of the population is of mixed European and Indian stock, with Spain being by far the dominant European source. Even in the 24th century, Paraguay's primary industry is agriculture, with nearly 30 percent of the population being employed on the nation's corporate-run farms and ranches. What



little mechanical industry does exist is primarily concerned with meeting the markets of the country itself, rather than with selling to foreign markets.

Some have argued that Paraguay continues to exist as a sovereign nation only by virtue of its importance as a buffer state between Brazil and Argentina. There may be some truth to this statement, especially given the fact that Paraguay has never been known for its close bonds of friendship with other nations. In fact, it warred often with its neighboring countries throughout much of its history. But with the rise to power of Brazil and Argentina after the Twilight War, the nation soon found itself outgunned by its neighbors and settled back into a very passive role.

Life in 24th-century Paraguay can be called idyllic. The population has stabilized at a level that can be easily maintained. The climate is kindly to agriculture, and even in the cities, daily life is carried on at a pace characteristic of Hispanic nations of several centuries ago. The daily siesta is an integral part of the schedule, and there is little of the hustle to get things done that is so common to much of the rest of the world. This can be infuriating to foreigners. It is not unusual, for example, for a person to bring a vehicle to a shop to be worked on, only to wait for days while the mechanic "gets into the mood." But for those with a taste for relaxation, Paraguay can be a paradise.

URUGUAY

Uruguay lies on the Atlantic coast of South America, between Brazil and Argentina. Its population is more than 90-percent European, and as is common among such nations, only a very small percentage of the populace works at agriculture, the rest being employed in industry or service occupations that require good education. Uruguay's climate is temperate, and the nation's geography is such that it consists almost entirely of grasslands. Over 90 percent of the land is farmed, with all but 10 percent of that devoted to pasture.

Uruguay has a long history of being quarreled over by the Portuguese and the Spanish (later represented by Brazil and Argentina). In 1726, its capital and largest city, Montevideo, was established by Spain to counter Portuguese influence in the area. During the course of the 18th century the Portuguese were all driven out, but shortly thereafter, in 1820, Uruguay was annexed by Brazil. In 1825, Uruguay joined with Argentina in an attack on Brazil and became an independent nation in 1828.

During the next 150 years, Uruguay's government was considered very progressive, social programs being high on its list of achievements, for example. But a few decades before the Twilight War, a slumping economy and attacks by urban guerrillas (the Tupamaros) caused the involvement of the military in the government, contributing to popular unrest.

PARAGUAYAN ECONOMICS

Paraguay has a very stable economy, which contributes to the security of its easy-going people.

Industrial Capacity: 4 Rudell Units
Agricultural Output: 105%, net exporter of animal products and plant oils
Mineral Production: 91%, net importer of machinery
Power Production: 82% (87% solar, 13% atomic, 0% mineral), net importer of power
Principal Trading Partners: Argentina, Brazil, Germany

URUGUAYAN DEMOGRAPHICS

With less than 6,000,000 people, Uruguay's population is less than even Guyana's, making it the smallest on the South American continent.

Population: 5,820,000 (96% urban, 4% rural)
Literacy: 97%
College Education: 72%
Life Expectancy: 93.5 male, 97.5 female

Largest Cities:
Montevideo (4,920,000)

URUGUAYAN ECONOMICS

Tied closely to Argentina's economy, Uruguay's is on the upswing in 2300.

Industrial Capacity: 9 Rudell Units
Agricultural Output: 107%, net exporter of animal products
Mineral Production: 87%, net importer of metals
Power Production: 103% (100% solar, 0% atomic, 0% mineral), net exporter of power
Principal Trading Partners: Argentina, America, Britain

VENEZUELAN DEMOGRAPHICS

With nearly 50,000,000 people, Venezuela falls roughly at the middle in terms of population among 24th-century South American nations.

Population: 46,509,000
(89% urban, 11 % rural) Literacy: 98% College Education: 72% Life Expectancy: 96.3 male, 705.3 female

Largest Cities:
Caracas (15,084,000),
Maracaibo (2,804,000)

VENEZUELAN ECONOMICS

Venezuela enjoys a very good economy, relatively unaffected by the vagaries of power politics between Argentina and Brazil.

Industrial Capacity: 8 Rudell Units
Agricultural Output: 93%, net importer of grain
Mineral Production: 106%, net exporter of metals
Power Production: 702% (71% solar, 0% atomic, 29% mineral), net exporter of power
Principal Trading Partners: America, Canada, Japan



During the First Rio Plata War (2203 to 2207), Brazil annexed the nation once again. Argentina responded by attacking Brazil but after a long, wearying struggle was forced to admit defeat. The Second Rio Plata War (2235 to 2237) weakened Brazil's political and economic power, and hence its hold on Uruguay. In the Third Rio Plata War, Argentina once again attacked Brazil through Uruguay, freeing the nation from Brazilian dominance (and taking some of Uruguay's territory for its own in the bargain).

In 2300, Uruguay is even more of a satellite to Argentina than Chile is. Its economy is ineluctably linked to Argentina's, and without Argentine military power, it would undoubtedly be annexed by Brazil once again. But life is comfortable for Uruguayan citizens. Their cities boast the same conveniences that Argentina's hold. Their work is no more difficult, and being incapable of deciding the issue of Argentine/Brazilian competition, they feel little inclined to worry over it. In the meantime, business is strong, the pampas are beautiful, and life is sweet.

VENEZUELA

Ruled by Spain since the 17th century, Venezuela was freed by Simon Bolivar in 1821 and became a sovereign nation in 1830. For a little more than a century thereafter, it was ruled by a succession of military dictatorships, but in 1958 it became a representative democracy and remained so even through World War III and its aftermath. The nation is blessed with rich mineral resources, especially oil, but much gold as well. It also has a climate agreeable to agriculture and to tourism. With a gearing up of manufacturing just prior to the Twilight War, Venezuela had one of the healthiest economies on the South American continent, and this made it able to develop quickly after the war, although it has never been a major contender against either Brazil or Argentina.

In the 24th century, Venezuela is still one of the most prosperous nations in Latin America. Its population is almost 80-percent mestizo (a mix of European and Indian ancestry), and like America, the government sponsors education, entertainment, and even housing, making the life of its citizens extremely comfortable. Venezuela's stability has also encouraged investment by foreign businesses and even international megacorporations.

One result of all of this has been something of the urban sprawl characteristic of Anglo-America, only in miniature. While there remains much non-urban land along Venezuela's northern coast, much of it is devoted to tourism, and the cities are heavily suburbanized and completely interconnected by roads, air routes, and a combination of conventional and airfilm train nets. The one city that still retains the character of a 20th-century metropolis, with skyscrapers and a very dense population, is Caracas, the capital.



Australia

AUSTRALIAN DEMOGRAPHICS

As a mediator between nations, Australia gains much world respect, and its citizens are very proud of this fact.

Population: 22,680,000
(56% urban, 44% rural) Literacy: 99% College Education: 87% Life Expectancy: 91.3 male, 98.0 female

Largest Cities:
Sydney (3,475,000),
Newcentre (2,882,000),
Melbourne (2,641,000)

Following the chaos of the Twilight War, Australia experienced a number of changes of fortune in its climb to its present status as a starfaring nation. But the hard work of its citizens ameliorated the effects of damaging events and capitalized upon the potential of beneficial events, bringing the nation hard-won success. The Australians are understandably proud of their accomplishments.

HISTORY

No historian will deny that the Twilight War (1995-2000) was the most destructive war in human history. No nation, no matter how isolated, escaped the effects of the war. Australia was no exception. Following the nuclear exchanges of late 1997, Australia all but ceased to exist as a nation. Thirty percent of the population perished in the first strike, which also accounted for the destruction of Australia's industrial base and oil refining capacity. With its government left powerless and its economy destroyed, Australia slipped into chaos.

For the next 40 years, the only cohesive force on the entire Australian continent was the Australian military. Australian troops established cantonments in New South Wales, Victoria, and the cities of Darwin in the north and Fremantle on Australia's west coast. These forces regulated food production and distribution inside their cantonments but abandoned the regions outside.

The next 100 years saw nearly unlimited growth for Australia. Under the leadership of the new Australian government, reconstruction of New South Wales and Victoria began in the early 2040s. However, resettlement of the Outback was not in the cards: The Australian government felt that rebuilding New South Wales and Victoria was all Australia could handle at the time. As a result, Fremantle and Darwin remained islands of civilization thousands of miles from the cities of the south. The rebirth of the European Space Agency in the early 2040s and the launch of *Europa* from French Guyana in 2048 spurred the creation of the Australian Space Administration (ASA). Unfortunately, lack of funding hindered the development of a viable system until the 2080s, when *Neptune 1* soared into low Earth orbit. Permanent space stations and solar power satellites followed in the late 2080s.

The year 2088 marked a special occasion for Australia. An ongoing international discussion concerning the territoriality of orbits and other worlds resulted in a series of treaties and agreements known as the Melbourne Accords. Most nations signed the Accords; some, including the nations of the ESA, would not. In particular, the failure of Great Britain to sign the Accords wounded the relationship between Australia and Britain, propelling Australia toward America, by far the major signatory of the Accords.

The early 2100s saw the beginning of a long-lasting cooperation between Australia and America. The two nations cooperated in the development of a joint space program which could compete with the ESA. Later, Australia and America cooperated in the development of a joint Australian-American stutterwarp drive. The result, the American/Australian probe *Connestoga*, was launched to Barnard's Star in 2155. Following the successful flight of the manned *Crux Australis* to Barnard's Star in 2157, the Australians stepped up their space program considerably. Due to shortages of tantalum, the Australians were able to construct only a few starships, and these were devoted to exploration of what would later become the American Arm. The Australians did, however, continue development within the solar system, constructing a lunar colony at Aristerchus and a scientific station on Jupiter's moon, Callisto.

The Alpha Centauri War of 2163 saw Australia become the mediator in the conflict between Argentina and the ESA. Following Australia's successful negotiation of the end of the war and the rush to colonize Tirane, Australia wasted no time in constructing a small fleet of colonization vessels and establishing its colony of New Canberra on that planet. Having exhausted their supply of tantalum, the Australians were fortunate to locate several large deposits of the metal in a section of their Tiranean territory which adjoined the nearby Japanese colony. Unfortunately, the Japanese staked their own claim to the same territory and its tantalum. After a short conflict, the Australians and the Japanese worked out an agreement to share the tantalum deposits.



AUSTRALIAN ECONOMICS

Although it has had to overcome some tremendous hurdles in the past few centuries, Australia's economy is presently in very good shape.

Industrial Capacity: 3
Rude/I Units Agricultural
Output: 103%, net exporter
of grain Mineral Production:
85% percent, net importer
of metals (principally from
off-world) Power Production:
108%, net exporter of power
(83% solar, 8% atomic, 7 %
mineral) Principal Trading
Partners: America, In-
donesia, Azania, Germany

The late 2160s and 2170s saw Australia and its ally, America, join forces in the exploration and future colonization of the American Arm. The Australian-American Exploration Council (AAEC) was formed to coordinate exploration of the Arm: Australian and American survey vessels journeyed down-arm in search of habitable worlds. The year 2183 marked the independence of Tasmania and Queensland from Australia. When the Australian Parliament announced plans to re-incorporate the two traditionally autonomous regions into the nation, some objection was raised by the governments in Hobart and Cairra. Following a heated debate, a national referendum was held. The Australian people narrowly voted to award independence to both regions.

The discovery of King and its incredible reserves of tantalum by the Americans in 2132, and its subsequent colonization by both America and Australia in the late 2190s, opened the door to the completion of Australia's national reconstruction. While the Americans concentrated on expanding the fledgling American Space Force, the Australians sold much of the yield from their initial tantalum strikes. The enormous capital which Australia received from this financed the resettlement and initial terraforming of the Outback and set the nation squarely on its feet financially.

By joint agreement, the Australians and the Americans had divided the American Arm into two sub-arms of colonization. With the initial colonization of Botany Bay in 2212 and Kingsland in 2217, the Australian off-world effort settled into a period of slow development. The Huntsland colony on King grew steadily as new colonists arrived from Earth; the Botany Bay colony began to settle in, and the Kingsland colony looked to be a moderate success.

The failure of the Botany Bay colony in 2214 was a turning point in Australia's colonization effort. The Australian populace, which had had high hopes for the colony, was furious. Amid a flurry of rhetoric and blame, the prime minister and his cabinet resigned. Re-colonization of Botany Bay did not take place until 2233, when a privately financed effort went back to that world.

Australia continued the full-scale development of its colonies well into the late 23rd century. The new Botany Bay colony concentrated in microelectronics research and construction. The Kingsland colony, although growing slowly, showed great promise as terraforming began on that world. And the Huntsland colony continued mining the rich metal deposits of King. Further colonization was no longer feasible since the American Arm possessed no more habitable worlds.

The 2260s were marked by the assimilation of Papua New Guinea into Queensland. The Queenslanders, who economically and militarily dominated their neighbors to the north, quietly took over Papua's government, closely tying it to their own. In 2290, when the two nations formally joined together, the name of Papua was chosen for the new nation, as a gesture to the Papuans, who made up the bulk of its population, and a message to the rest of Australia, emphasizing that the new nation was moving further from its traditional Australian roots.

THE OUTBACK

In 2300, much of Australia remains sparse desert with almost no population. A relatively primitive hydrogen road net stretches across it in many locations, and this is one of the few places on Terra where private vehicles can be run with no speed limits imposed upon them.

24TH-CENTURY AUSTRALIA

The Australia of 2300 is a nation forever transformed by the Twilight War. The traditional notions that Australia was a passive nation of sheep ranchers and tourist attractions disappeared during Australia's reconstruction efforts of the late 2000s. Today's Australia is composed of the gleaming cities and factories of the south and the extensive farmlands of the terraformed Outback. Because of its exceptional political and economic stability, Australia has become the nation of choice as a site for international discussion, and Australians are neutral to most aspects of world affairs.

Private Life

Australians enjoy an extremely comfortable lifestyle. The economic strength of Australia, coupled with its low population, has served to elevate Australia's average personal income to the fifth highest on Earth (behind France, America, Great Britain, and Germany, respectively). Most Australian families own at least one personal vehicle, either for business or recreational use, and home ownership is almost universal.

Australians have myriad forms of entertainment at their disposal. Australia's four Tri-D networks operate under the auspices of the Australian Tridimensional Television System. Programming includes sports, films, and around-the-clock news services. Most Australian cities are homes to professional soccer and football teams; the level of competition between these teams is always very high.

Work

The Australian work force is quite large, with unemployment near only one percent. While much of Australia's industry is heavily automated, demand for manual labor remains high as the arable regions of the Outback continue to expand. Most Australians attend six years of college, entering their careers at age 24. Retirement is common (and in many cities, mandatory) at 70. Most families rely on a single income.

Major Australian employers include DunArmCo of Adelaide, a major energy weapons producer, and Southern Cross Mining Corporation of Melbourne.

Transportation

Australian transportation systems, as a result of reconstruction around the turn of the last century and constant renewal since that time, are among the best to be found anywhere on Earth.

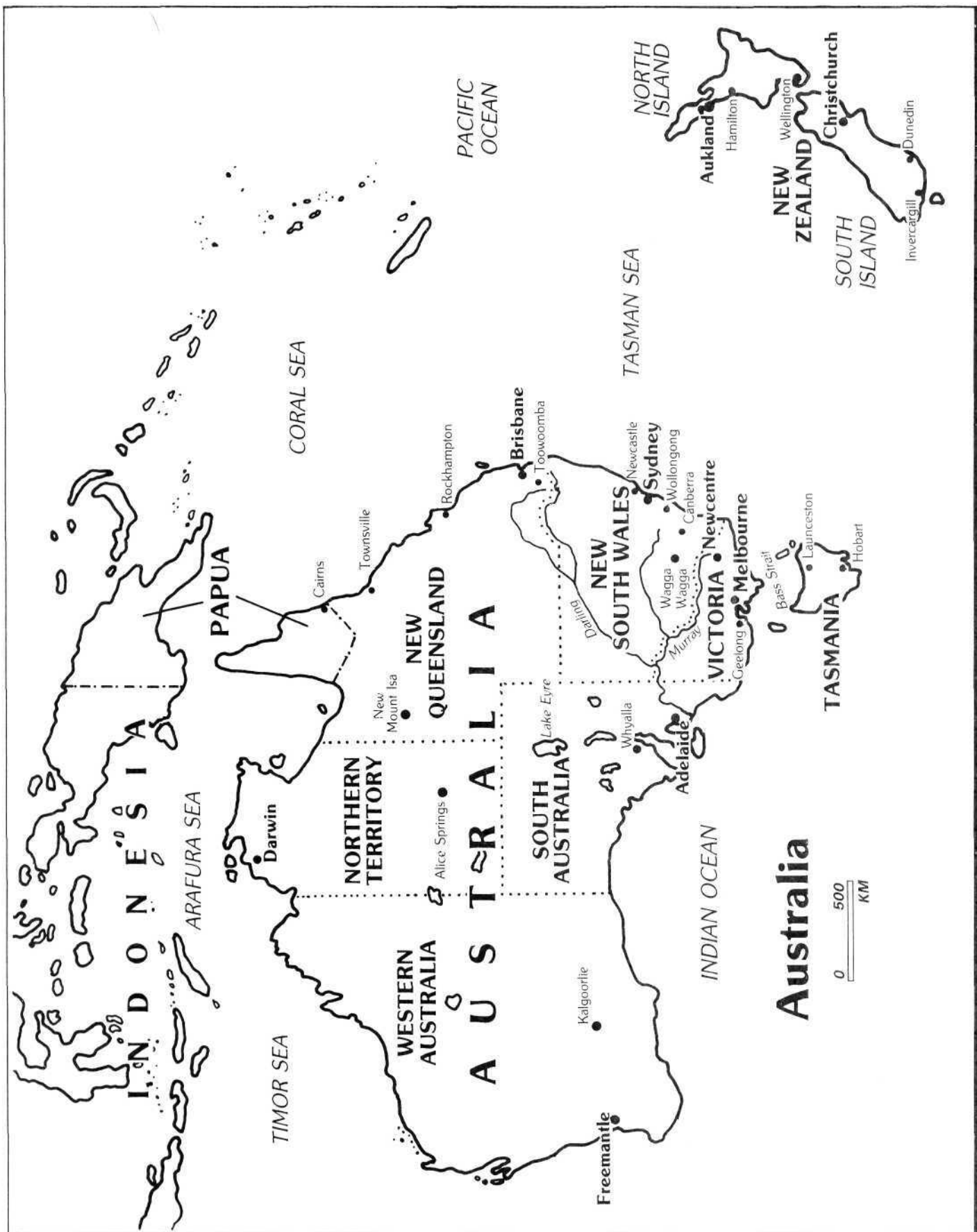
Surface Transportation: Because of its sheer size, Australia has invested heavily in its surface transportation net. The national airfilm network, Australines, provides regular freight and passenger service to most major cities. This is augmented by rapid intercity air transport between the cities of Fremantle, Sydney, Darwin, and Newcentre, and short-range VTOL service to all other cities. An advanced road net allows personal transportation between all Australian cities and towns.

Interface Transportation: Australia owns and operates five catapults, near Fremantle, Alice Springs, New Mount Isa, Brisbane, and Darwin. These provide the bulk of Australia's to-orbit freight service. For passenger service, regular space plane flights depart Newcentre, Sydney, and Alice Springs. Australia's national shuttle service, Victoria Interface, operates shuttle flights from Alice Springs and New Mount Isa.

Colonization

Australia has placed a heavy emphasis on off-world colonization. Australia's three off-world colonies—on King, Botany Bay, and Kingsland—are sources of pride for most Australians, who point to the sky and remember their own origins as a British penal colony. The Australian economy has benefited enormously from off-world colonization, as the mineral deposits of King and the microelectronics factories of Botany Bay have assured Australia's place in the world economic picture.

Currently, the Australian colonization effort is working to place new settlers on Botany Bay and Kingsland. Large monetary incentives and free space travel are among the perks offered to new colonists. The development of the Outback has, however, restricted the size of the labor pool available for off-world settlement.



Japan

JAPANESE DEMOGRAPHICS

An island nation with nearly the population of America, Japan has one of the densest populations on the globe in the 24th century.

Population: 186,312,000
(98% urban, 2% rural) Literacy: 700% College Education: 90% Life Expectancy: 95.7 male, 98.4 female

Largest Cities:

Tokyo (14,096,000),

Yokohama (11,144,000),

Osaka (10,728,000)

The island nation of Japan was one of the few major 20th-century industrial powers to come through the Twilight War without any direct damage. Being an industrial exporter and the center of much international trade and banking, the nation was faced with economic upheaval when the war tore up its trading partners, but through the will of its people it survived and, with its extensive ocean transportation capacity, dominated international trade for decades to follow. Japan is a resource-poor nation which has relied on trade to meet a major portion of the country's needs. During the past few centuries, a majority of this trade has been with the emerging nations of South America. But even so, in order to ensure the availability of resources well into the future, Japan has placed a high priority upon the use of its technological expertise in the development of new sources of agricultural and mineral products. To meet its needs, the nation turned to the one nearby source that it could easily control—the ocean. As the primary power in its region, both economically and militarily, the nation expanded its territorial boundaries to allow unhindered access to those ocean resources.

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Today, Japan is a modern major economic power with a greater territorial claim on Earth than most other nations. It is heavily populated and maintains strong industry, and has once again begun to take a position as a technological leader. Using developing deep ocean mining techniques, the nation can draw all the resources it needs, both mineral and agricultural. This ability has given Japan such a level of independence that it has little need to maintain interstellar colonies. Even though it is not one of the six major spacefaring nations, Japan does possess three successful colonies and one outpost. Still, the nation maintains something of an isolationist nature, and its people have strong ties to their homeland and their homeworld.

GEOGRAPHY

Japan is a nation of islands whose appearance is essentially unchanged from its 20th-century outlines. The primary differences occurred in the 21st century when Japan took back control of the Sakhalin island, known to the Japanese as Karahuto. With America tied up in its second civil war, Japan also took custody of the American South Pacific territories, including Guam and Midway. The Philippines were also annexed later on in the century, following heavy economic investment and the building up of industry there.

The total land area controlled by Japan is still relatively small, with much of it being too mountainous or too otherwise inhospitable to be of any great value. In fact, only about 15 percent of the nation's total land area is arable, and agriculture is very critical to the nation of 150 million people.

Mountainous terrain, 250 volcanoes—a number of which are still active—and seasonal typhoons all serve to keep the populace confined mostly to the eastern coasts of the main islands. There lie the great cities of Japan, including Tokyo, Yokohama, and Osaka. The largest of these is the nation's former capital, Tokyo, with a population of more than 14 million. This makes it not only the largest city in Japan but one of the largest in the world.

To the south of the main islands are Japan's newer territories, which include such groups of islands as the Marianas, the Gilberts, the Carolines, and the Marshalls. In the vicinity of the



Gilberts is the city of Kaitel, which is the largest single underwater habitat in the world, with a population of approximately 500,000. The city serves as the center of an enormous ocean-farming region which has filled the country's agricultural deficit and has actually turned Japan into something of an agricultural exporter. The city is also the center of Japan's profitable deep-ocean mining industry.

ECONOMY

Japan has been a major world trade center since before the Twilight War. After the war, the country's shipping network formed the backbone of international trade for decades. Though its economic strength has fluctuated somewhat over the past 300 years, Japan has always maintained its status as a trade leader. Today, Tokyo possesses the world's single largest international stock exchange and is considered by many to be the world's financial capital. With Japan's powerful economic position, the yen has become one of the strongest international currencies, second only to the French livre, which is still dominant.

The Japanese banking industry is a major economic force in itself, making numerous worldwide investments, helping to stimulate national economies while providing security for its own economy. Finances from Japanese banks have supported numerous colonization and scientific projects. The Niyazawa International Bank was a major funding source for the stutterwarp tug project pioneered by William Stanton and maintains a strong foothold in America's Trilon Corporation. In fact, it is difficult to find a successful international corporation that does not receive some backing from Japanese banks. This is not always apparent, as the Japanese investors handle their transactions with subtlety and effectiveness, seldom flaunting their strengths and intentions.

Japan's economy is generally classed as post-industrial, meaning that a lot of Japan's businesses are based on service industries, the strongest of which are general information processing and banking, with many other industries revolving around the success of these two. Even so, Japan maintains strong mining, ship building and design industries, as well as high-tech electronics and electromechanical development and production.

From the late 20th century, Japan's robotics industry went unmatched until the French began placing a heavier emphasis on this field in the early 2200s. By that time, however, Japan had already developed walker technology and sold design rights to Bavaria in the mid-2250s, leading to the development of the Kz VII combat walker. Japan has a number of its own walker designs, including combat walkers. Industrial designs are exported only in small quantity due to their expense. Military designs are used only by Japan's armed forces and are not exported. In fact, until recently, they were not even used off-planet.

JAPANESE ECONOMICS

The strength of the Japanese economy is based upon the nation's ultra-modern technology and ultratraditional work ethic.

Industrial Capacity: 76
 Rudell Units
 Agricultural Output: 95%,
 net importer of animal products,
 net exporter of marine food
 Mineral Production: 700%,
 net exporter of oil
 Power Production: 110%
 (5% solar, 37% atomic, 58% mineral),
 net exporter of power
 Principal Trading Partners:
 America, France, Brazil

THE NIYAZAWA INTERNATIONAL BANK

Although technically an international megacorporation, the Niyazawa International Bank is unusual among such corporations for three reasons. The first of these is that it retains much stronger ties to the nation of its birth than do other megacorporations, which generally shed those ties completely. Secondly, the Niyazawa International Bank is primarily a bank. Other megacorporations are heavily involved in banking, because it makes them money at the present, but they are just as heavily involved in other money-making activities, and they would drop banking in a moment if it ceased to be profitable. The third reason that the Niyazawa International Bank is different from other international megacorporations is actually the most telling, and it somewhat explains the other two reasons. That is, the Niyazawa International Bank is one of the few major businesses on the planet still owned and operated by the family that began it. This fact elevates the Niyazawa family as one of the wealthiest, and most powerful, business dynasties on the globe.

GOVERNMENT

Japan's government remains much as it was prior to the Twilight War. It is still essentially a constitutional monarchy, but the emperor has made a slight resurgence in power and prestige. Shortly after the war, the capital was moved back to the city of Kyoto, where it sat prior to the Meiji restoration. This was done as a symbol of a return to old traditions, away from the failed Western civilization. At this time, Japan took a controversial rearmament stance, as she could no longer count on the once mighty umbrella of the American military.

Some Japanese citizens feared that this rearmament would be perceived as a threat by other nations, bringing their retribution. Even so, the rearmament took place, and for several decades Japan possessed one of the strongest military forces in the world. Japan's military remained on par for industrial nations through the 23rd century and saw action against Manchuria at the request of the French during the Central Asian War. Today, the nation's military forces include a small fleet of starships which are currently deployed in the French Arm in order to protect Japan's colonies against the invading Kafers. This force has already seen action against the Kafers at Kimanjano and 61 Ursae Majoris. While the former action resulted in serious damage to the Japanese fleet, the latter was a combined effort with German forces resulting in the destruction of a Kafer *Delta-class* battleship. As a move to better protect her colonies, Japan has mobilized her imperial marines and has begun sending them, along with their sophisticated hardware, to the threatened worlds.

The 24th-century government of Japan leans toward a slightly isolationist approach to international and interstellar politics. While the economy is kept strong and the country maintains numerous worldwide investments, foreign cultural influence is regulated, and it is often difficult for outsiders to even visit the country, let alone live there.

SOCIETY

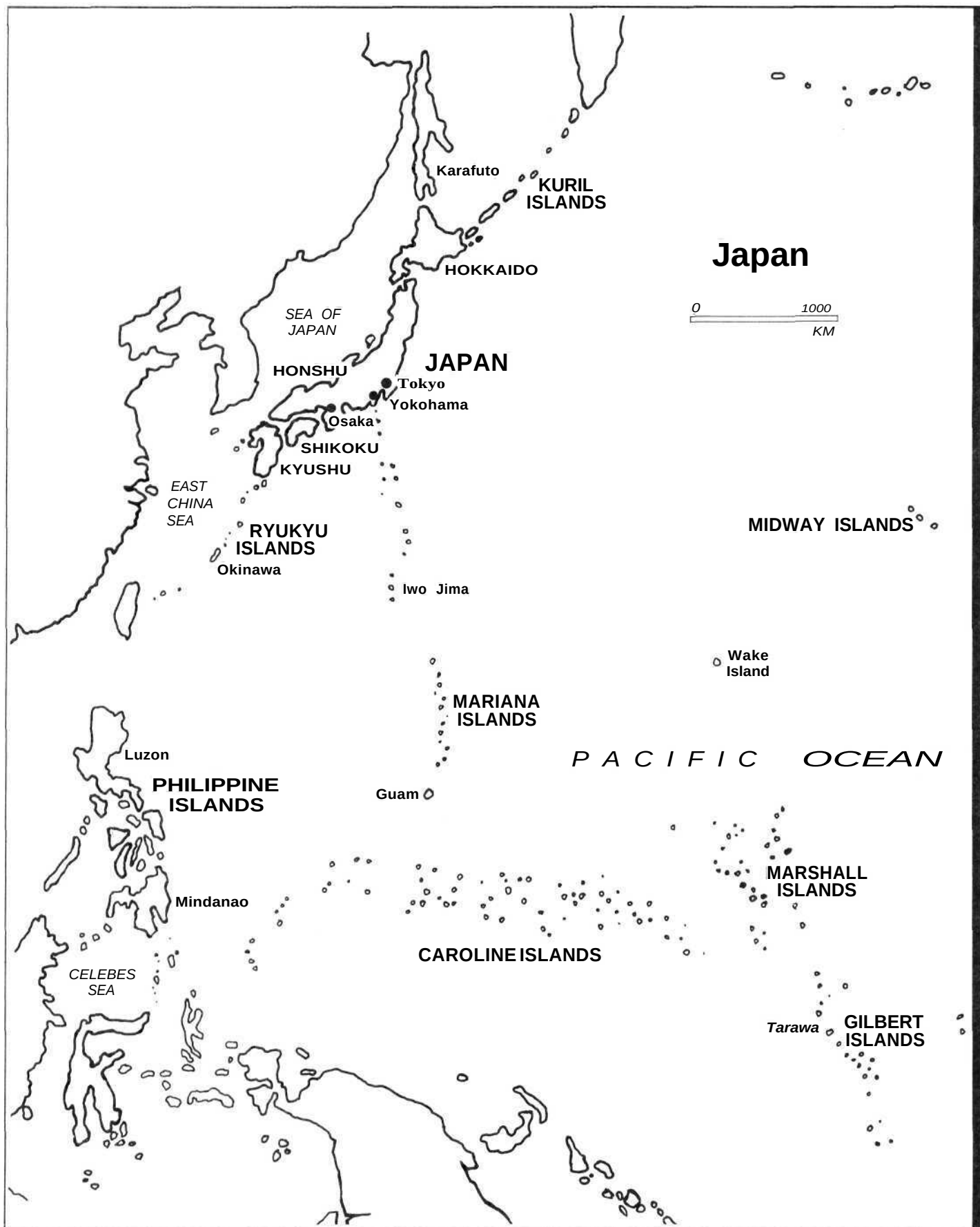
Japanese society is a mixture of old and new. While modernization and change continue, the people maintain extremely strong ties to traditionalism. This tendency is as strong today as it has ever been in industrialized Japan. In fact, much of the country's cultural isolationism is the result of the Twilight War's demonstration of the failure of Western society. The Japanese do not look down on Westerners but rather view them with respect as fallen giants.

The Japanese do not look down on Westerners but rather view them with respect as fallen giants.

Modern Japanese culture places a great emphasis on the "old ways," resulting in the stronger re-emergence of Buddhism and even more so of Shintoism. The latter's close ties to nature become more specifically defined as close ties to Earth. This attachment to humankind's homeworld has kept Japan from greater colonization efforts than it might have made. On colony worlds, numerous shrines dot inhabited regions, with each shrine containing numerous plants or objects taken from Earth. However, attitudes have been changing, and many Japanese, especially colonists, have begun to expand the scope of their views on nature to include extraterrestrial nature, though even more traditionalists hold to the older beliefs.

Japan's language hasn't changed much over the past 300 years except that the use of Kanji—a system of ideographs taken long ago from the Chinese language—has been almost completely phased out of day-to-day written language. Except where certain traditional names are concerned, the Japanese syllabaries of Hirigana and Katakana are used. This replacement of the Chinese ideographs has made the written Japanese language somewhat more streamlined, though less traditional. Kanji is still taught today but is treated as more of an art form than a common means of writing.

As for other languages, the most commonly used by the Japanese still include English, which remained a relatively common language throughout the post-World War III years, and French, which is also spoken by many people involved in international dealings.



Europe

FRENCH STATISTICS

Not a true superpower, France is a dominant nation.

Population: 106,902,000 (88% urban, 12% rural) Literacy: 700% College Education: 89% Life Expectancy: 93.0 male, 97.6 female

Largest Cities:
Paris Metroplex (14,000,000),
Rhine Metroplex (22,000,000),
Marseilles (7,000,000)

Industrial Capacity: 77
Rudell Units Mineral Production: 32%, net importer of minerals Power Production: 75% (70% solar, 18% atomic, 12% mineral), net importer of power Principal Trading Partners: Extraterrestrial colonies, Britain, America, Manchuria, European community

GERMAN STATISTICS

Germany is France's strongest competitor.

Population: 105,238,000 (89% urban, 11 % rural) Literacy: 700% College Education: 91% Life Expectancy: 92.7 male, 97.2 female

Largest Cities:
Ruhr Metroplex (23,000,000),
Berlin (6,550,000),
Munich (5,562,000)

Industrial Capacity: 70
Rude/I Units Mineral Production: 68%, net importer of minerals Power Production: 68% (86% solar, 8% atomic, 6% mineral), net importer of power Principal Trading Partners: Britain, extraterrestrial colonies, America, Japan, Manchuria, European community

Although their dominance in world affairs has ceased to be what it was in the 19th century, the European countries are still powers to be reckoned with in the year 2300.

THE EUROPEAN COMMUNITY, PAST

A unified Europe had long been a dream of European intellectuals, and some steps had been taken towards that end with the establishment of the ECM (European Common Market) in the late 20th century, and the subsequent agreements and treaties which resulted in the EEC (European Economic Community). The plan was to streamline mercantile exchange, eliminate tariffs, and (eventually) establish a single currency for the members of the community. Some dreamed of the formation of a federalized Europe, in which the nations would become subcomponents in a "United States of Europe."

By 1995, only a few of the goals of the organization had been met. The reduction in tariffs had little opposition (it made European goods increasingly competitive in the continental market, and helped keep foreign competition out). Great Britain balked at the idea of eliminating all customs restrictions, fearing that unlimited access to the continent would allow rabies back into the country (the disease had been eliminated in the UK for decades, and was kept out largely due to stringent quarantine procedures). Other nations were not happy at the role to be played by West Germany and France (whose economies dominated the continent) in the "new order." A Dutch diplomat is said to have remarked, "It all sounds like the old order to me....They have the thumb, and we are under it."

With the outbreak of the Twilight War, as WWII has come to be called, all hopes of a European Community were destroyed by the resulting chaos and economic dislocation. International trade collapsed, governments ceased to be effective, and the light of civilization was extinguished over much of Europe. Full recovery took more than a century in some places.

THE EUROPEAN COMMUNITY, PRESENT

Since the border revisions of the 21st and early 22nd centuries, Europe remained reasonably stable until the recent reunification of Germany. Despite the predictions of some political analysts, this has not resulted in the de-stabilization of European politics, although relations between France and the newly created *Bundesrepublik* were somewhat strained for a time. The outbreak of the Kafer War seems to have caused Franks and Teutons to forget their differences for the moment and face their common foe. Those who see patterns in the flow of history will see parallels with the late 20th century, when France and Germany seemed to be on the verge of a cooperation unprecedented in modern history. If anything, the common economic interests of the various European nations are stronger than ever before. Many observers believe that it is just a matter of time before Europeans realize that their common political interests are equally as strong.

The main driver of the economy of Europe is interplanetary trade. Because of the expenses of transport, most of the mineral resources come from within system, usually from planetoids or other sources with a shallow gravity well. Interplanetary goods must be (almost of necessity) low-bulk, high-value materials, or luxury goods of one sort or another. Whatever the case, those nations with easy access to off-world resources (either through colonies or by having goods which are in demand on other worlds) have the strongest, most resilient economies. The nations with the strongest economies tend to acquire political power as well.

Off-world colonies of European powers are treated as if they were a part of those powers for the purposes of tariffs within the European community. In many cases, this is literally true (France has several extraterrestrial metropolitan departments, for instance).

Nations

Traditionally, Europe is defined as the area north of the Mediterranean Sea. Europe in 2300 is divided into 27 nations: France, Germany, Britain (also known as the UK), the Scandinavian Union, Russia, Latvia, Poland, the Netherlands, Flanders, France, Germany, Czechoslovakia,

the Ukraine, Switzerland, Austrovenia, Hungary, Romania, Bulgaria, Serbia, Croatia, Albania, Greece, Portugal, Spain, Catalonia, Italy, and Iceland.

Politically, three nations dominate Europe: France, Britain, and Germany (*plus ca change, plus c'est le meme chose*—"the more things change, the more they stay the same"). Economically, these three are only slightly above the rest of the continent. Here is a brief summary of each nation's position.

France: France's humiliation in the War of German Reunification brought down the old government, and France is now an empire. The aftershocks have slightly reduced French prestige in the international community, but its position in Europe is almost unchanged from that of the previous century.

France's African and interstellar holdings provide excellent markets for its manufactured goods and produce exotic imports for trade with other terrestrial nations. Despite a highly developed scientific establishment (including majority control of the ESA), French industry lags somewhat behind that of other nations in the practical application of technological advances.

Germany: With reunification two years ago, Germany emerged as the number two economic power in Europe. Retaining most of Bavaria's holdings in space, and inheriting its ownership of a portion of the ESA, Germany's economy kicked into high gear, and it soon eclipsed or tied every other country in Europe except for France. In some ways, Germany is France's chief rival in EEC trade.

Politically, the humiliation of France gained Germany a higher position among the movers and shakers on the continent. Germany has a lot of emotional baggage as far as a number of European countries are concerned, even though the World Wars are more than three centuries in the past. The recent outbreak of war with the Kafers has forced Germany and France into an unprecedented cooperation, however, as they unite against a common foe. It remains to be seen what the permanent effects of this alliance will be.

The United Kingdom: Britain (often called the United Kingdom) was hit hard by the Twilight War. Two things enabled Britain to recover: the indomitable spirit of the British people, and the personal example of King Charles, who survived the war and served as a rallying point for the nation during its darkest hour. Britain would never again know the world status it had held during the 19th century, but it remained a major European power and stood in uncontested second place on the continent until the formation of the Scandinavian Union. Income from trade with its interstellar possessions, along with a continued emphasis on scientific research, has ensured that the British economy remains strong, and British technological expertise is still in demand.

Russia: Russia is the non-Marxist republic that established itself out of the fragments of the prewar Soviet Union. Containing most of the old RFSSR, and consisting mostly of ethnic Russians, the nation inherited most of the Soviet Union's universities and technological expertise, but it has not been able to achieve the level of political and economic status its leaders feel it deserves. With no substantive off-world assets, Russia is denied direct access to the economic cornucopia that interplanetary trade provides, and it has suffered somewhat from the lack. Russian theoretical science is very advanced, but unfortunately for their economy, it remains theoretical.

Latvia: Latvia is a small, independent Baltic republic. Formerly part of the USSR, it broke off after the Twilight War and has gone its own way ever since. As a buffer state between Poland and Russia, it has wisely chosen to retain good relations with both. By 2300, it has been independent for the longest uninterrupted stretch in its history, and the population is content.

Poland: Poland's position as the site of the most intensive battles of the Twilight War left the populace with a tremendous xenophobia that three centuries later has only begun to fade. The acquisition of Lithuania, oddly enough, has placed the Poles in the position of occupier instead of occupied, which they find enjoyable. The Lithuanians are silent on the matter.

Poland has few off-world colonies, but it (in combination with Germany) pioneered the process of deep-sea mineral extraction in the Baltic. The manufacturing sector of Poland's economy benefited greatly, and its industry is in very good shape today.

The Netherlands: Heavily depopulated during the Twilight War, it was almost two centuries before the Netherlands (also called Holland) had completely recovered demographically. Economically, the nation is presently overshadowed by its larger neighbors but still manages to produce the agricultural specialty items for which it became famous in the 19th and 20th centuries.

BRITISH STATISTICS

Britain runs a close race with Germany in terms of economic and political power in 2300.

Population: 111,644,000 (83% urban, 17% rural) Literacy: 99% College Education: 98% Life Expectancy: 93.0 male, 97.1 female

Largest Cities:
Thames/Birmingham
Metroplex (26,740,000),
Leeds (7,832,000),
Edinburgh (3,975,000)

Industrial Capacity: 77
Rudell Units Mineral Production: 73%, net importer of minerals (mostly from extraterrestrial colonies) Power Production: 69% (92% solar, 3% atomic, 5% mineral), net importer of power
Principal Trading Partners: France, extraterrestrial colonies, America, Germany, Japan

RUSSIAN STATISTICS

In the 24th century, Russia proper is about equivalent to America in terms of population, but without recourse to off-world trade, its economy lags behind America's.

Population: 212,321,000 (82% urban, 18% rural) Literacy: 99% College Education: 98% Life Expectancy: 94.1 male, 98.3 female

Largest Cities:
Moscow Metroplex
(16,034,000),
St. Petersburg (8,112,000),
Gorkiy (7,110,000)

Industrial Capacity: 76
Rudell Units Mineral Production: 68%, net importer of minerals Power Production: 88% (72% solar, 24% atomic, 4% mineral), net importer of power
Principal Trading Partners: Japan, France, European community

SCANDINAVIAN UNION STATISTICS

The Scandinavian Union enjoys a modest lifestyle and a stable economy.

Population: 44,532,000
(68% urban, 32% rural) Literacy: 100% College Education: 92% Life Expectancy: 94.2 male, 98.7 female

Largest Cities:

Oslo Metroplex

(12,721,000),

Stockholm Metroplex

(8,950,000),

Helsinki (2,643,000),

Copenhagen/Odense

Metroplex (5,250,000)

Industrial Capacity: 4
Rudell Units Mineral Production: 62% (primarily from undersea deposits), net importer of minerals Power Production: 65% (68% solar, 28% atomic, 4% mineral), net importer of power Principal Trading Partners: European community, Australia, Mexico, Japan

SPANISH STATISTICS

Spain sold her tantalum resources without making any permanent gains. Only tourism and fishing keep her present economy afloat.

Population: 75,702,000
(54% urban, 46% rural) Literacy: 97% College Education: 83% Life Expectancy: 92.0 male, 95.7 female

Largest Cities:

Madrid (8,900,000),

Seville (7,690,000),

Zaragoza (7,240,000),

Malaga (6,900,000)

Industrial Capacity: 5
Rudell Units Mineral Production: 76%, net importer of metals Power Production: 92% (64% solar, 23% atomic, 13% mineral), net importer of power Principal Trading Partners: European community, Mexico, France, Britain, Australia

Ireland: Reunited with Ulster as a result of the Twilight War, Ireland managed to come to a relatively bloodless solution to its religious differences and now maintains peaceful relations with Britain, its largest market. A primarily agricultural economy, Ireland depends on its livestock production and fishing fleets to produce surplus food for export. As they have in the past, however, many Irish have the urge to travel and can be found throughout human space.

The Scandinavian Union: The Scandinavian countries were unable to sit out the Twilight War completely; Norway's membership in NATO prevented that. The northernmost portions of the peninsula saw heavy fighting in the prenuclear and postnuclear stages of the war, and destruction was severe. Recovery took some time.

At present, the Scandinavian Union has a very healthy economy, but it lacks the continued access to off-world products and resources that stellar colonies give to powers such as France and Germany.

Flanders: The area now known as Flanders has only recently won its independence from France (during the War of Flemish Independence, 2293), and the nation has yet to establish a fully viable economy (or at least one that operates without governmental tinkering). The nation's industrial plant was in a considerable state of disrepair, having been allowed to deteriorate during the period of French domination, and the current economy depends largely upon agricultural specialty products for the bulk of its income. Large foreign subsidies were necessary in the first year of independence (these were mostly provided by Germany), but the need for these is dwindling as the manufacturing sector of the Flemish economy begins to revitalize itself.

Czechoslovakia: Like Poland, Czechoslovakia had trouble recovering from the Twilight War, although it did manage to re-exert control over its prewar territories by 2020. Industrial rebuilding required extensive French assistance, but the region is rich in natural resources and was soon prospering. Today, Czechoslovakia is not a major power economically or politically (it never was), but its standard of living is fairly high, and the citizens are largely content.

The Ukraine: The Ukraine has always been one of the richest agricultural areas in the world, and it remains so in 2300. The agricultural wealth of the Ukraine made it a major ally of France during the famine-stricken years following the Twilight War, and the alliance persists to the present.

Although minuscule compared to their American counterparts, the "factory farm" has taken root in the Ukraine because of the economies of scale that they permit. No individual farmer can afford the equipment and supplies that are necessary for intensive modern agricultural techniques.

Switzerland: Traditionally neutral, Switzerland managed to avoid involvement in the Twilight War but was unable to avoid the aftereffects of the nuclear strikes and the worldwide economic collapse which followed. Traditionally self-sufficient, however, the Swiss closed their borders and sat out the chaotic times until order was restored, then came out of their caves and resumed business as usual. Because of their neutrality (and their business and banking laws) Switzerland is the country where many large corporations maintain their Earth headquarters.

Austrovenia: Formed when Austria absorbed Slovenia in the years following the Twilight War, Austrovenia is not one of the more technologically advanced nations. It supports itself by the production of specialty agricultural products.

Hungary: Aside from some border changes with Romania, Hungary is largely as it was before the Twilight War. Its economy depressed since the 2280s, Hungary has recently nationalized its industry in an attempt to make it competitive once again in world markets.

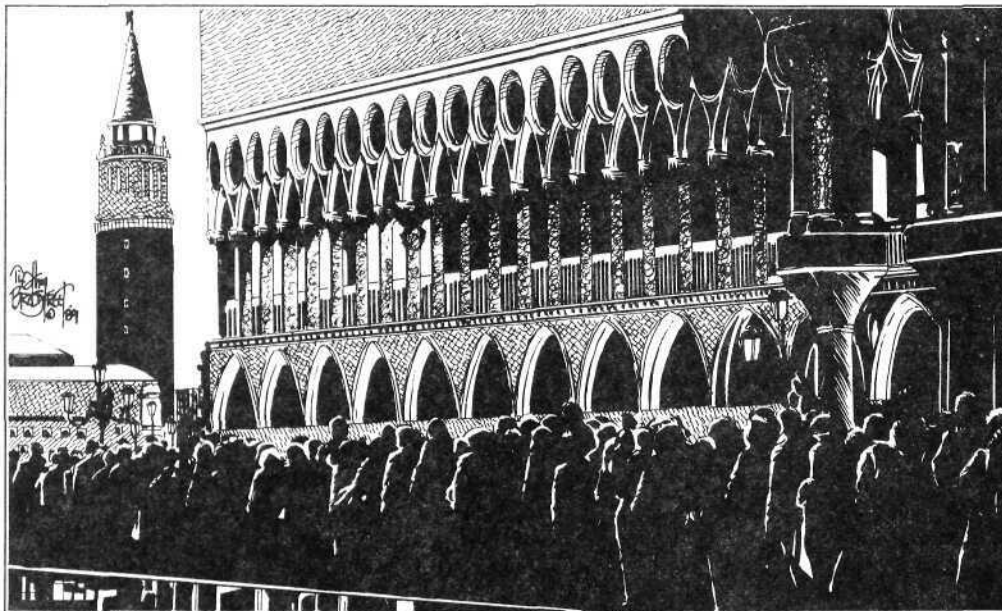
Romania: The Romanian economy is based on its agriculture, although a small industrial base in consumer goods is maintained; it depends upon the extraction of minerals from the floor of the Caspian Sea for raw materials. Territorial losses to Hungary after the Twilight War are a constant source of friction between the two countries.

Bulgaria: Like Romania, Bulgaria's economy is based in agriculture, although Bulgaria derives some income from tourism (primarily from Black Sea beaches).

Serbia: Serbia is mostly mountainous, and its economy is based primarily on small-scale production of agricultural specialties, such as sugar beets or lumber for the luxury trade.

Croatia: Croatia maintains a small-scale industrial base, but, like Serbia, its economy is primarily agricultural.

Albania: In 2300 Albania remains much the same as it has always been, a primarily agricultural nation without sizable industry or natural resources. Its government remains the last bastion of classical Marxism left on Earth.



Greece: Despite the campaigns fought on and around its territory, Greece has managed to retain its pre-WWIII boundaries. Never really an industrial giant, and very nearly self-sufficient agriculturally, Greece has come to depend increasingly upon tourism to maintain its standard of living. Fortunately, the Aegean and its associated islands contain some of the most profitable tourist territory in the world.

Spain: During the tantalum rush, Spain profited mightily from its deposits of that mineral, which have largely been mined out at the present time. Spanish politicians were unable to convert this temporary influx of funds into a permanent economic or political advantage, however. In part, this has been due to early ESA sanctions against Spain. When stutterwarp technology was first achieved by the ESA, the knowledge was kept secret from the world at large. The ESA approached Spain for its tantalum, and Spain revealed the existence of star drive to the rest of the world, thwarting ESA plans to monopolize the technology. Some bad feelings still persist from what is sometimes viewed as Spain's betrayal of the ESA.

Today, Spain's main income is from its agriculture, mostly wine and citrus fruit for the European market. Also, tourism is a major industry along the Mediterranean coast and the Balearic islands. A few small-scale tantalum mines and ore processing plants are still in operation; the large corporations have left the exploitation of Spanish tantalum to small, wildcat operations.

Portugal: Portugal has benefited greatly from the fact that it shares a common linguistic and cultural heritage with Brazil. Heavy Brazilian investments in the country have driven the smaller nation's industrial economy into high gear (relatively). Portugal, like Spain, had tantalum deposits and profited from their exploitation, but these are largely depleted now.

Catalonia: Catalonia was formed from portions of the old Spanish province of the same name. Catalonia is largely dependent upon agriculture for its income, although it does include some of the most beautiful seacoast cities in the Iberian peninsula and receives a sizable amount of its income from tourism.

Italy: The industrial north of the Italian peninsula was devastated during the Twilight War and did not recover for many decades. A land without major deposits of iron or coal, Italy is heavily dependent on outside sources for its raw materials. Italian theoretical science is respectable, but like France, its applied technology leaves much to be desired.

Iceland: Iceland's small population and relative lack of natural resources have kept it a minor power, but the inhabitants seem to prefer this. Self-sufficient in energy and food, and geographically isolated, Icelanders have a "take it or leave it" attitude when it comes to the rest of the world.

A small proportion, like their Viking forebears, succumb to the "wanderlust," however, and can be found anywhere in human space.

PORTUGUESE STATISTICS

In 2300, Portugal is experiencing an economic upsurge as a result of Brazilian interests in European markets.

Population: 15,758,800 (63% urban, 37% rural) Literacy: 93% College Education: 79% Life Expectancy: 91.7 male, 93 female

Largest Cities:
Lisbon Metroplex (6,521,000)

Industrial Capacity: 8 Rudell Units Mineral Production: 14%, net importer of minerals Power Production: 86% (78% solar, 21% atomic, 1% mineral), net importer of power Principal Trading Partners: Brazil, European community

UKRAINIAN STATISTICS

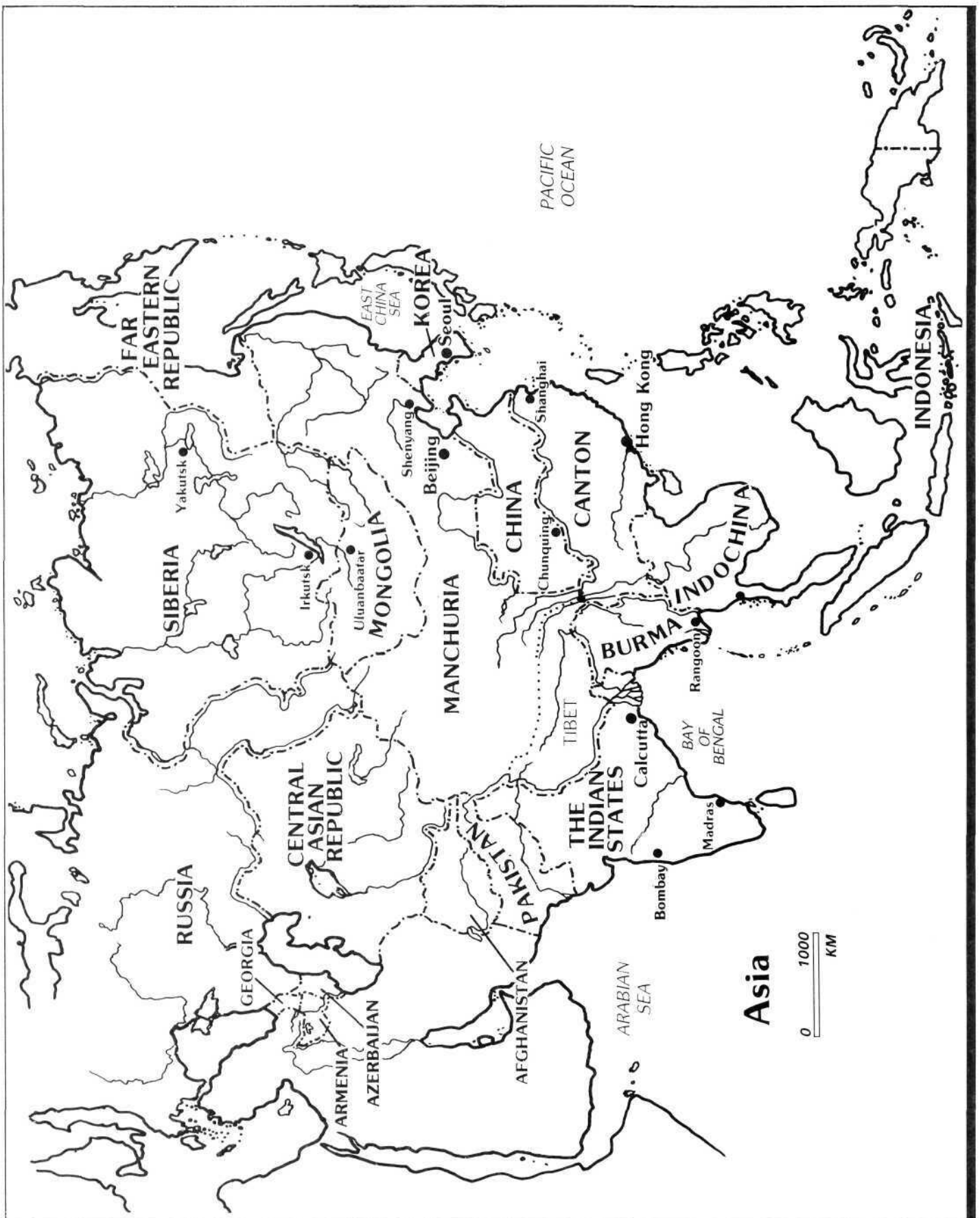
Having split from the USSR in the aftermath of World War III, the Ukraine has done well for itself, even establishing an extraterrestrial colony.

Population: 36,294,000 (42% urban, 48% rural) Literacy: 94% College Education: 79% Life Expectancy: 93.0 male, 97.2 female

Largest Cities:
Kiev (6,549,000),
Odessa 4,548,000,
Kharkov (2,435,000)

Industrial Capacity: 2.4 Rudell Units Mineral Production: 3%, net importer of metals and radioactives Power Production: 67% (48% solar, 32% atomic, 20% mineral), net importer of power Principal Trading Partners: France, Russia, European community





AZERBAIJANI STATISTICS

A sovereign nation once again, Azerbaijan has settled comfortably into the 24th century.

Population: 18,266,000
(76% urban, 24% rural) Literacy: 97% College Education: 78% Life Expectancy: 97.2 male, 94.9 female

Largest Cities:
Kirovabad (3,415,000),
Stepanakert (1,371,000)

Industrial Capacity: 2
Rudell Units Agricultural
Output: 95%, net importer
of grain Mineral Production:
100%, net exporter of oil
Power Production: 93%
(35% solar, 5% atomic,
60% mineral), net importer
of power Principal Trading
Partners: Russia, Burma,
CAR

Asia has long been a land of mystery to the Western mind. The origins of its peoples are shrouded in the darkness of centuries past; in comparison, the ancient civilizations of Mesopotamia, where the history of the Western world began, are an open book. For centuries, Asia was too distant for Westerners to visit and learn its secrets. With the rise of world travel, Asia came within the reach of Europe's ocean vessels, but much of the Asian continent remained closed off from the Western world in self-imposed exile. During the 20th century, the communist governments that ruled in Asia's nations were hostile to Western democracy and materialism, another barrier to communication between East and West.

The Twilight War, by bringing about the collapse of the world economy, and by virtually halting world travel, physically locked the lands of Asia off from the Western nations once again. Many Asian nations believed World War III to be vindication of their mistrust of Western society and ideals. Left largely to their own devices for the first few decades after the war, these Asian powers spent that time working to unite the traditional values of their peoples with the development of modern industry.

In 2300, nations such as Manchuria and Canton have demonstrated that the union can be accomplished, and they have joined the most advanced nations of the West in placing colonies among the stars.

AZERBAIJAN

At the time of the Twilight War, Azerbaijan, located in the Caucasus region on Iran's northern border, was a state in the Soviet Union. With the USSR's collapse as a result of that war, Azerbaijan declared itself a sovereign state. The Soviets were in no position to contest the declaration. Although Azerbaijan had also traditionally claimed territory from northwestern Iran as part of its region (territory that had, itself, claimed independence from Iran during the middle of the 20th century in a communist revolt, a revolt that Iran quickly put down), that Iranian territory was seized by the Armenians in their postwar declaration of independence. With the establishment of the French Peace, the Azerbaijanis found themselves unable to effectively press their claim to the contested area.

While the rest of the world worked to restore status quo after the war, the Azerbaijanis remained aloof, jealously watching over their borders, working at self-sufficiency, building upon their fledgling manufacturing and mining industries, and developing a stable government. Carefully chosen trade agreements, generally involving Azerbaijani oil, helped to ensure that the nation would remain independent.

Modern Azerbaijan is a well developed, though tiny, nation that contributes to the world economy in a measure that belies its small size. It is extremely urbanized, and almost 20 percent of southwest Asia's manufacturing needs are met by this country's factories.

AFGHANISTAN

Just prior to the Twilight War, Afghanistan was a thorn in the side of the Soviet giant to its north. Its people were fanatically Moslem of a dozen different warring sects, and their cultural ties to peoples just across the Soviet border caused periodic social unrest in Southern Soviet lands, much as the Moslem government in Iran did. And the Afghanis would not cease their fighting when the Soviets occupied the nation to support the pro-Soviet Afghan government. Afghanistan's rebels fought relentlessly against superior numbers and superior weaponry. Perhaps the only thing that kept them from actually driving the Soviets out was that the individual Afghan factions battled among themselves nearly as fiercely.

With the fall of Soviet power as a result of the Twilight War, the Afghanis established an independent government, made ties with the Central Asian Republic, and then went back to their nomadic lifestyle in the mountains. Things remained much the same until well into the 22nd century. But the lowland cities slowly continued their industrialization, and, as a result, the influence of modern education steadily spread into the Afghan highlands.



Modern Afghanistan is a land much behind the times. Its people are still very distrustful of foreigners—an aspect of their fierce independence. Travel is difficult, particularly in the mountains where much of the populace still travels by foot or by mule. Only in the valleys can modern roads and cities be found, and even these are in the style of nearly a century past.

BURMA

During the British colonial period, Burma was included as part of the colony of India. But after India was granted its independence in 1947, Burma established itself as a sovereign power just one year later. During the next 50 years, abortive communist revolts occurred twice in Burma, and in response to the trouble caused by those revolts the nation developed a strong, one-party government to maintain order. This strong central government served the nation well in the chaos that followed the Twilight War, allowing Burma to maintain its status as a leading producer of rice despite the collapse of world trade. As the world slowly recovered in the early decades of the 21st century, Burma found many markets for its rice and for the teak of its extensive forests. But problems with swelling population kept the nation from further monopolizing on its agricultural output, as more and more became required to meet the needs at home. By the 24th century, the Burmese population growth has been brought under control, but the nation remains largely agricultural, without any significant industrialization.

CANTON

Canton is one of the nations that came into existence with the fragmentation of 20th-century China. It has done neither so well as its sister Manchuria nor so poorly as its other sister, modern China, in integrating itself into the technological world culture of the 24th century. Canton's vast population has made remarkable progress in developing modern farming techniques, and the nation has placed an emphasis on technological development as well, in hopes of more fully becoming a member of the society of spacefaring nations. Cantonese domination of the Indochinese peninsula has given the nation access to needed minerals, and to date, the country has established one extraterrestrial colony: Syuhlahm at Zeta Tucanae. That colony, in turn, has industrialized very nicely, and the reciprocity of its trade agreement with its parent country has helped to further improve Canton's economy.

However, it has been only the most adventurous and modern-thinking of the Cantonese that have emigrated to Syuhlahm. The bulk of the population retains a very traditional attitude toward life, rejecting much of Western culture as destructive (as evidenced in three World Wars), and cautious of the disruption that advanced technology can bring.

BURMESE STATISTICS

Burma in 2300 is a largely agricultural nation with a very high population-to-land ratio.

Population: 95,886,000
(51% urban, 49% rural) Literacy: 79% College Education: 32% Life Expectancy: 82.0 male, 85.3 female

Largest Cities:
Rangoon (11,127,000),
Mandalay (1,217,000)

Industrial Capacity: 5
Rudell Units Agricultural Output: 115%, net exporter of rice Mineral Production: 83%, net importer of metals Power Production: 78% (48% solar, 13% atomic, 39% mineral), net importer of power Principal Trading Partners: CAR, Korea, the Indian States

CANTONESE STATISTICS

Not as powerful as its sister nation (Manchuria), Canton is a strong force on Terra, nonetheless.

Population: 509,203,000
(68% urban, 32% rural) Literacy: 85% College Education: 33% Life Expectancy: 94.1 male, 96.8 female

Largest Cities:
Shanghai (18,636,000),
Canton (15,009,000)

Industrial Capacity: 30
Rudell Units Agricultural Output: 110%, net exporter of rice Mineral Production: 46%, net importer of oil and metals Power Production: 106% (87% solar, 10% atomic, 3% mineral), net exporter of power Principal Trading Partners: Manchuria, Korea, Indochina

CAR STATISTICS

The CAR has inherited much of what was the southern portion of the 20th-century USSR.

Population:

1,320,750,000 (84% urban, 16% rural) Literacy: 98% College Education: 67% Life Expectancy: 101.7 male, 105.8 female

Largest Cities:

Novosibirsk (3,818,000), Barnaul (2,117,000), Tomsk (1,998,000)

Industrial Capacity: 132

Rudell Units Agricultural Output: 93%, net importer of grain Mineral Production: 53%, net importer of oil and metals Power Production: 124% (92% solar, 7% atomic, 1% mineral), net exporter of power Principal Trading Partners: Manchuria, France, Japan

CENTRAL ASIAN REPUBLIC

The Central Asian Republic (CAR) is made up largely of Kazakhstan, which formed the bulk of the 20th century's southern Soviet Union. The Twilight War brought an end to Russian control of the area, and the Central Asian Republic was born. Since the 21st century, Russia has sought to reclaim its lost territories, but there has been no question that the Central Asian Republic will retain its independence.

The area included in the CAR is home to many Moslem peoples, and although none have shown the fanaticism evident in nations further to the south, they maintained their Moslem religion even when officially part of the atheistic Soviet Union. The effort the Soviets spent to modernize the region during the 20th century left the CAR with the foundation on which to build after the Twilight War, and the resulting blend of technology and Moslem heritage has created a unique culture. In 2300, the CAR is placing an emphasis on exploration of the solar system, hoping to discover deposits of tantalum which would give the nation a ticket to the stars. But in the meantime, the CAR is locked into its status as an Earth-bound, second-class nation.

CHINA

Of the three nations that arose with the splitting of 20th-century China, modern China is the most backward. While Manchuria holds mineral-rich areas and industrialized cities, and Canton holds bountiful agricultural lands, China holds mainly mountains and a low population.

Most of the citizens of 24th-century China live almost exactly as their ancestors have for thousands of years. One result of this has been the development of a modest tourist trade, as people from ultra-technological nations come to China to gain an understanding of ancient ways of life. But the very primitiveness of China works to limit tourism as well. Travel in the country is simply too difficult for most foreigners' tastes, and many settle for watching documentaries about China in the comfort of their own homes.

FAR EASTERN REPUBLIC

Another fragment of the 20th-century Soviet Union, the Far Eastern Republic (FER) consists of the regions of Kamchatka and the Pacific coast. The extreme northern latitude of this nation has prevented it from developing the population necessary to industrialize to any great extent.

Fishing is a major industry along the coast of the FER where most of the population lives. During recent years, Russia has been courting the area, hoping to return it to the fold.

GEORGIA

Besides Armenia and Azerbaijan, the Caucasus region is also home to the Georgian people. And like those nations, Georgia declared its independence from the Soviet Union in the wake of the Twilight War. Georgia is smaller than either of its southern neighbors, but like Azerbaijan, it had been well industrialized by the Soviets during the course of the 20th century.

Working to exploit this industrialization, Georgia entered the 21st century well prepared to join the ranks of the technological nations. Treaties were pursued with France, who viewed Georgia as an ideal location from which to keep an eye on Russia. But Georgia's small size has prevented it from becoming a power in its own right. Modern-day Georgia is a modestly prosperous nation famous for its writers, artists, and musicians, as well as its quaint cities located in picturesque natural settings.

THE INDIAN STATES

Although India had made considerable progress after gaining its independence from Britain in 1947, lowering its rate of population growth, improving its agricultural output, and working to leave behind its caste system, war with Pakistan kept the nation from fully concentrating on its internal problems. As a result of the Twilight War, the Punjab seceded from India, and during the next half-century several other regions—Rajasthan, Bombay, Mysore, Madras, Bengal, and Bihar—followed suit, leaving a much-reduced India. Since that time, the Indian subcontinent has been the scene of frequent wars among these states, springing from border disputes, religious differences, and political conflicts. The peoples of the various nations have suffered terribly, and the Indian States, as they are collectively known, are viewed with abhorrence by the rest of the world whose peoples feel that they have largely left such petty disputes behind.



GEORGIAN STATISTICS

Like its neighbor Azerbaijan, Georgia is a stable nation in 2300.

Population: 14,826,000 (81% urban, 19% rural) Literacy: 100% College Education: 82% Life Expectancy: 700.2 male, 103.5 female

Largest Cities:
Tbilisi (2,940,000),
Batumi (1,082,000)

Industrial Capacity: 7.5
Rudell Units Agricultural
Output: 102%, net exporter
of animal products Mineral
Production: 88%, net im-
porter of metals Power Pro-
duction: 100% (69% solar,
8% atomic, 23% mineral)
Principal Trading Partners:
France, Russia, Azerbaijan

INDOCHINA

After the Twilight War, the nations of Indochina (Vietnam, Laos, Cambodia, and Thailand) continued much as they had for centuries before, battling among themselves for supremacy on the Indochinese peninsula. More often than not, Vietnam came out on top, but it was never able to press its advantage enough to occupy and unite the other nations.

In 2030, the nation of Canton, seeking a source of oil, attempted to seize the region, but France, who for centuries had an interest in Indochina, intervened. As a result of the Cantonese-Indonesian War (2264 to 2268), Canton was finally able to dominate the peninsula, establishing the puppet state of Indochina, with each of the peninsula's original nations retaining its identity as a province.

By 2300, under the overseeing of Canton, Indochina has finally achieved some peace. But there are also periodic instances of sabotage and guerrilla clashes between the state's provinces, put down only by Cantonese force. With Cantonese aid, progress has been made in industrializing parts of the peninsula, primarily in Vietnam and Thailand.

INDONESIAN STATISTICS

Tenacity has brought the island nation of Indonesia to its status as a starfaring nation.

Population: 321,148,000
(87% urban, 13% rural) Literacy: 96% College Education: 71% Life Expectancy: 99.8 male, 104.0 female

Largest Cities:

Djarkarta (21,759,000),
Surabaya (5,617,000)

Industrial Capacity: 32
Rudell Units Agricultural
Output: 74%, *net importer*
of rice Mineral Production:
47%, *net importer of oil and*
metals Power Production:
118% (89% solar, 7%
atomic, 4% mineral) Principal
Trading Partners: Australia,
France, America

INDONESIA

As a result of the collapse of the world economy in World War III's aftermath, the emerging industries of Indonesia suffered terribly. Recovery, when it came, was slow, and during the early part of the 21st century, Indonesia sought to spur its economy by seizing Indochina, but it was halted by the French after succeeding in annexing Malaysia.

Indonesia's equatorial location allowed fairly easy access to orbit after the building of a catapult, and the nation invested in the construction of modest orbital mining facilities. Although it attempted to expand its borders several more times during the next two centuries by attempting to seize more territory, it was successful only in capturing the Andaman Islands from Bengal (2265). But this gain gave Indonesia access to tantalum, and it joined the ranks of the starfaring nations.

KOREA

Although the world economic collapse caused by the Twilight War brought chaos to both North and South Korea, South Korea, with the impressive industrialization it had achieved by the war's beginning, was able to recover much more quickly than its northern neighbor. Given South Korea's economic health in the first half of the 21st century, communist North Korea accepted annexation by the democratic South almost without quarrel. Through the rest of that century, the unified nation worked to spread its southern industrial power through the North. During this period, Japan invested heavily in Korea's development, working to economically dominate the nation's growing industry. But Manchuria, seeking to avoid the establishment of a Japanese stronghold on the continent, expelled the Japanese and pressured Korea into nationalizing the facilities that Japan had built.

Through the 22nd and 23rd centuries, Korea worked closely with Manchuria, ever in the larger nation's shadow. In 2300, Korea is a very modern industrial nation, but it is definitely dominated politically by Manchuria. Korean citizens compare favorably with Texans in terms of quality of life, and they do not seem to view Manchuria's domination as onerous, preferring it to domination by Japan.

MANCHURIA

During the 20th century, Manchuria was the most industrialized region of the nation of China. Extensive rail lines covered the area, bringing raw materials to Manchuria's manufacturing centers. With the collapse of a central Chinese government just after the Twilight War, Manchuria declared its independence, and with foresight, it seized mineral-rich lands around it, including much of western China and all of Tibet.

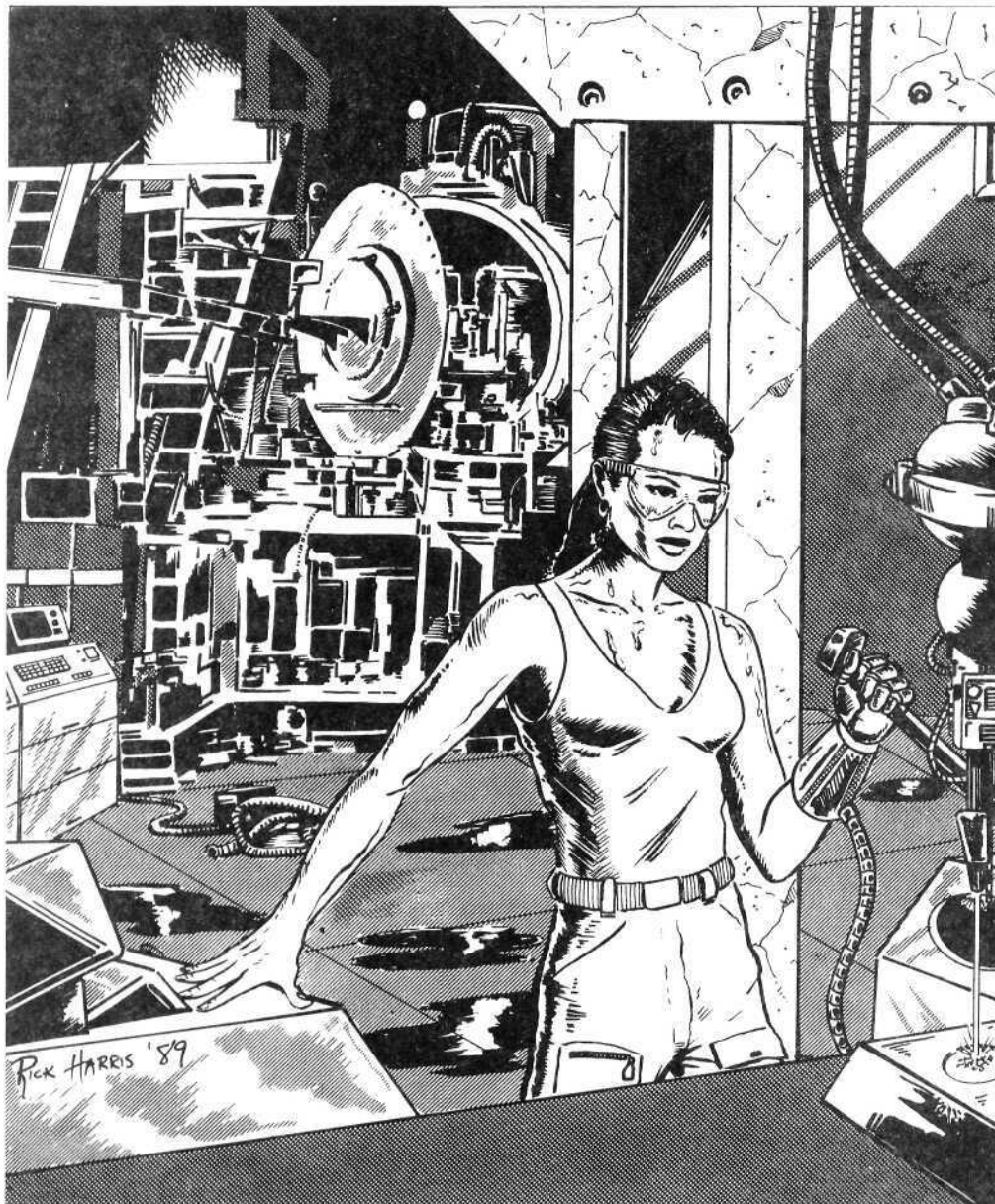
*Manchurian colonies are therefore proud, tightly knit groups
of people...*

During the 21st century, industrialized Manchuria found itself to be the major regional power, and it filled this role willingly. Shaping the traditional values of its people to the needs of developing technology, it remained at the forefront through the next two centuries as well, challenging even the power of France in the realm of Asia.

Manchuria's mineral resources also yielded up tantalum, which ensured that the nation would remain a world power as it developed off-world colonies. The nature of these off-world colonies says much about the character of the Manchurian people—in most cases, colonists are set down on a planet with almost no resources and are expected to either tame the environment they find themselves in or adapt themselves to it. Manchurian colonies are therefore proud, tightly knit groups of people demonstrating the culture of the Terran Manchus from which they spring.

MONGOLIA

Mongolia has maintained its independence since 1912, and it is almost as thinly populated



MANCHURIAN STATISTICS

The most powerful nation in Asia, Manchuria has inherited all the best of 20th-century China.

Population:
2,717,509,000 (81% urban, 19% rural) Literacy: 93% College Education: 45% Life Expectancy: 98.4 male, 101.3 female

Largest Cities:
Beijing (26,325,000),
Shenyang (17,600,000),
Taiyuan (11,320,000)

Industrial Capacity: 210
Rudell Units Agricultural
Output: 97%, net importer
of rice Mineral Production:
95%, net importer of metals
Power Production: 101%
(69% solar, 21% atomic,
10% mineral), net exporter
of power Principal Trading
Partners: Russia, FER, Korea

in the 24th century as it was in the 20th. But the Mongolians are a proud people, pointing to the centuries that they have eked a living from this barren, mountainous land. The bulk of Mongolia is, if anything, even more primitive than modern China.

SIBERIA

Largely abandoned by the Soviet Union as a result of the Twilight War, Siberia has been pared down by Manchuria, which absorbed part of the region during the 21st century. During the 22nd century, Russia reclaimed what remained of Siberia, but it has been unable to make any further progress toward regaining territory it lost after the war.

In 2300, Russia is pouring considerable effort into restructuring Siberia's climate, mainly by strategically damming northern rivers so as to create great inland lakes whose waters help to moderate the temperatures of this very cold region. The land lost to the waters of these lakes is more than made up for by the land opened to agriculture, and Siberia is becoming more populous than was ever before possible.

The Middle East

THE FLOWERING OF THE DESERT

One of the beneficial side effects of the imposition of the French Peace upon the Middle East is that modern solar power technology has come to the region along with it. This has allowed the irrigation of much larger portions of many of the nations, enhancing the crop production that was already becoming legend just before the Twilight War. In the 24th century, agriculture plays a very important part in the economies of many of the Middle Eastern nations, and the Confederation of Palestine, in particular, is famous for its citrus.

The Middle East was humanity's cradle, and it has been the seat of many great empires through history—empires such as Babylonia, Assyria, and the Ottoman Empire. It was also the birthplace of three far-reaching religions—Judaism, Christianity, and Islam—often in harsh rivalry with one another. It has consequently been the scene of many religious wars and much political strife throughout history.

In the Middle Ages, Christian knights from Western Europe flocked to the region to drive the Moslems from the Holy Land. Although they failed at that mission, they returned to their homelands with Arab mathematics and with trade agreements, two stimuli that helped to spark Europe's later industrial revolution.

That industrial revolution soon projected Europe into world dominance, and the cultures of the Middle East became overshadowed for a time. But the very industrialization that raised the West to power soon turned Western eyes back toward the Middle East, hungering for the region's oil.

In the meantime, rival Moslem groups battled with one another, seemingly unable to reconcile their differences. The 20th century saw the re-establishment of Israel as a nation, adding more fuel to the area's religious and political fires. The West and the Soviet Bloc struggled behind the scenes to raise to power those most friendly to their own views and to overthrow their enemies. Conflict flared continually in the area throughout this period.

The Twilight War brought complete chaos to the region. Western and Soviet Armies marched across the lands, seeking to ensure the continuance of the oil flow that powered their war machines elsewhere. Modern weapons clashed, oil refineries were bombed, and the emerging industrial economies of the Middle East nations were destroyed in a matter of a few months. Eventually, exhausted, the foreign armies withdrew, and the peoples of the Middle East were left on their own to survive as they might.

The Twilight War brought complete chaos to the region.

Early in the 21st century, France (with its allies) extended its dawning power into the region, helping the nations of the Middle East to rebuild. With a pragmatic and businesslike attitude, France insisted on the signing of treaties between traditional enemies, serving as arbiter when necessary, but always enforcing what came to be known as the French Peace.

By 2300, most of the nations of the Middle East have effectively joined the world of the 24th century. Traditional rivalries sometimes lead to guerrilla attacks by fanatical groups, but none of the nations' governments seek war; the scars of the past are still too evident. Modern cities rise where nomad herds once grazed, and trade between the nations is a matter of course, creating a Middle Eastern economic microcosm. In many Middle Eastern countries, oil production is still important for sale to world markets, being used in the manufacture of modern plastics and lubricants, but it has nowhere near the importance it did during the 20th century. Much of the Earth's oil is purchased off-world and used in orbital manufacturing facilities before eventually finding its way to Earth's surface in its final form.

Religious sites in the Middle East are, by treaty, considered to be commonly held by all of the Middle Eastern nations, instead of being the property of the country in which they are located. Millions of people every year travel to these holy sites, often coming from off-world, and the Middle Eastern nations benefit greatly from the tourism this engenders.

In general, the Middle East of 2300 has become a land of peace, allowing it to exploit its aura of ancient mystery. Under the watchful eyes of their French overseers, the nations of the Middle East live together in relative harmony, turning their attention toward the future of humanity.

ARABIA

France and its allies occupied Arabia after the Twilight War and worked to bring the country's oil fields back into production. Those oil fields were the primary basis for Arabia's economy throughout the 21st century, and with its defense being underwritten by France, Arabia's leaders were able to devote the income gained from the production of oil to build industry for the nation's future.

The oil fields became depleted early in the 22nd century, and Arabia gained its independence shortly thereafter. For the next hundred years it concentrated on consolidating the industrial gains it had made. By the middle of the 23rd century, Arabia was able to establish a colony on Beta Hydri, with some material assistance from Japan. The influx of trade from that colony has ensured that Arabia's economy will continue to grow in the future, if modestly.

Twenty-fourth century Arabia is a land of modern cities, ancient traditions, modest entertainments, and an outlook of hope. Its people retain many of their ancient traditions, but they also respect foreign cultures and consider themselves citizens of the world.

Armenia seems content to avoid relations with other nations.

ARMENIA

After a long history of foreign occupation interspersed with brief periods of independence, Armenia was able to declare itself a sovereign nation once again after the Twilight War, when the Soviets abandoned the region. A portion of Turkey was annexed by the new nation as well, which led to a Turkish resistance movement that fights on to this day.

Other than the battle to retain the territory it gained from Turkey, modern Armenia seems content to avoid interrelations with other nations. Its people work to maintain a simple life that is dominated by agriculture, with sheep and cattle grazing on the mountain slopes and crops growing in the fertile valleys.

BALUCHISTAN

As a result of the Iran-Pakistan War (2171 to 2176), Baluchistan was created by Pakistan as a buffer state between the two nations. In 2212, the Baluchis captured traditional Baluch territories from Pakistan and then, in 2213, from Afghanistan, officially incorporating all of this territory in 2235. In the decades that followed, the people of Baluchistan labored to bring their country the economic and political success that many other nations of the Middle East have managed to achieve. One problem that Baluchistan faces in its development is that a large number of its citizens do not care to join the modern world but hold rigidly to the traditions of the past. This has brought the country to the brink of civil war twice during the last century.

THE CONFEDERATION OF PALESTINE

Perhaps the best example of peaceful coexistence of different cultures is demonstrated in 24th-century Palestine. After over a century of periodic wars in the 1900s, the nations of Israel, Jordan, and Lebanon joined together with the new nation of Palestine, vowing to coexist peacefully, each ruling its own citizenry, but all occupying the same territory. The people of Palestine itself are slightly more numerous than the people of the confederation's other nations, and through their wisdom in settling conflicts, their example of tolerance for the cultures with which they share the land, and their absolute refusal to put up with fighting in the confederation, they have been the glue that holds all together.

KURDISTAN

Like the Armenians and Baluchis, the Kurdish tribesmen were able to seize territory traditionally theirs once the Twilight War disrupted the hold of other nations on the land. With the imposition of the French Peace on the Middle East, the Kurds have had little threat from neighboring nations and have been able to go about their largely nomadic lifestyle in peace.

ARABIAN STATISTICS

Arabia is undeniably the most advanced of the Middle Eastern nations, if the UAR is considered part of Africa.

Population: 16,206,000 (82% urban, 18% rural) Literacy: 53% College Education: 79% Life Expectancy: 78.2 male, 83.7 female

Largest Cities: Riyadh (2,676,000), Jidda (2,244,000), Mecca (1,468,000)

Industrial Capacity: 7.5 Rudell Units Agricultural Output: 87%, net importer of grain Mineral Production: 45%, net exporter of metals Power Production: 100% (78% solar, 16% atomic, 6% mineral) Principal Trading Partners: France, UAR, Japan

PALESTINIAN STATISTICS

The population of Palestine includes peoples from four independent nations, all dwelling peacefully within the same borders.

Population: 20,139,000 (79% urban, 21% rural) Literacy: 85% College Education: 56% Life Expectancy: 81.3 male, 84.6 female

Largest Cities: Amman (3,000,000), Beirut (2,808,000), Jerusalem (1,592,000)

Industrial Capacity: 7.6 Rudell Units Agricultural Output: 98%, net importer of grain, net exporter of citrus and truck produce Mineral Production: 45%, net importer of metals Power Production: 700% (82% solar, 77% atomic, 1% mineral) Principal Trading Partners: Arabia, UAR, France

IRANIAN STATISTICS

Having at last accepted other Moslem nations as their religious equals, and respecting the cultures of non-Moslem nations, the people of Iran are integrating themselves into the 24th-century world community.

Population: 75,164,000 (76% urban, 24% rural) Literacy: 85% College Education: 44% Life Expectancy: 53.9 male, 87.2 female

Largest Cities:

Tehran (14,837,000),
Esfahan (2,217,000),
Mashhad (2,199,000)

Industrial Capacity: 0.7

Rudell Unit Agricultural Output: 87%, net importer of grain Mineral Production: 113%, net exporter of metals and oil Power Production: 102% (58% solar, 10% atomic, 32% mineral), net exporter of power Principal Trading Partners: Britain, France, Kurdistan

SYRIAN STATISTICS

Although technically independent, the Syrian people live in the shadow of French advisors.

Population: 22,666,000 (75% urban, 25% rural) Literacy: 76% College Education: 23% Life Expectancy: 79.6 male, 84.4 female

Largest Cities:

Aleppo (3,046,000),
Damascus (2,145,000)

Industrial Capacity: 1.6

Rudell Units Agricultural Output: 78%, net importer of grain and animal products Mineral Production: 77%, net importer of metals and oil Power Production: 72% (98% solar, 2% atomic, 0% mineral), net exporter of power Principal Trading Partners: France, Germany, Arabia



IRAN

A large oil producer during the 20th century, and bordering on 20th-century USSR, Iran suffered heavily during the Twilight War. During the 21st century, Iran turned its attention to rebuilding its industry, and by the end of the century, it had settled its interior political problems as well, settling at last on a representative democracy with a religious figurehead much like the political figurehead in many constitutional monarchies (such as the United Kingdom).

Iran still has some quarrel with Iraq over their mutual border, but the French Peace keeps this from escalating into armed conflict.

IRAQ

During the 20th century, Iraq was far more industrialized than its more populous neighbor, Iran. The Twilight War destroyed much of this industrialization and lowered Iraq's population to a dangerous level. It has only been during the last century that Iraq has been able to fully recover from its decline, and it has found the other nations in the region a match for it in terms of power.

The French Peace protected Iraq during its recovery, and now it ensures that the neighboring nations are protected from any Iraqi dreams of empire as well. Like Iran, 24th-century Iraq is a modestly industrial nation with a relatively stable government in power.

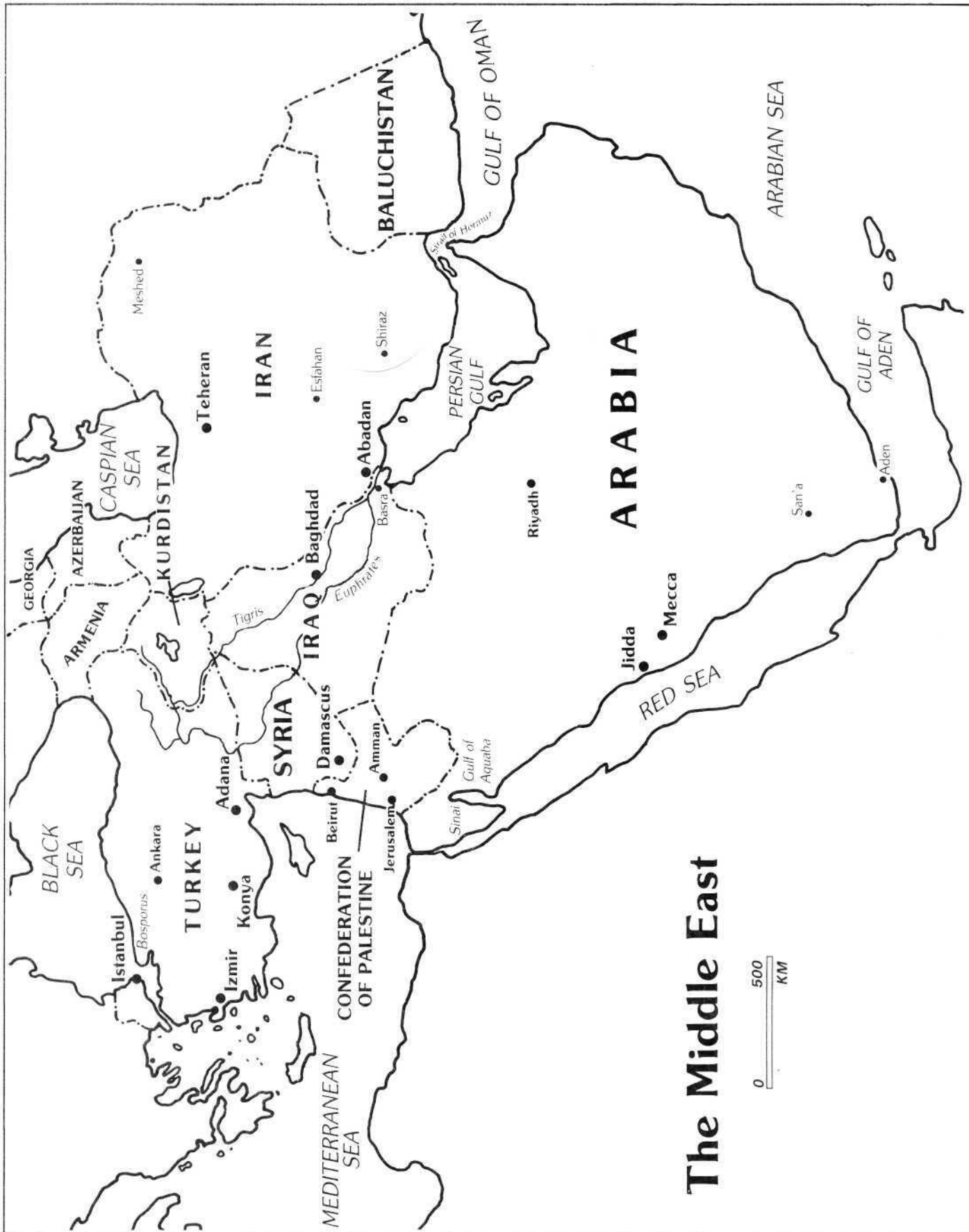
SYRIA

Syria suffered perhaps more than any other Middle Eastern nation during the Twilight War, and it has only been as the result of French occupation that the nation has recovered at all. Although Syria is technically independent in the 24th century, French presence in the nation is very strong, and it is mainly from here that France maintains its careful watch upon the Middle East.

TURKEY

Originally the center of rule for the Byzantine and then the Ottoman Empire, Turkey fell from power in World War I. Its attempts to modernize during the 20th century were marred by continual conflict with Greece, and the country suffered economic collapse as a result of the Twilight War.

Like the other nations of the Middle East, Turkey has been able to recover economically under the establishment of the French Peace, which also locks it into its status as a second-rate power. In the 24th century, Turkey attracts many tourists wishing to visit ancient sites of civilization.



The Middle East

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Africa

NORTH AFRICAN STATISTICS

North Africa consists of the following nations: Algeria, Berbera, Kanuri, Mauritania, Morocco, Polisaria, Tunisia, and the UAR.

Population: 173,003,000 (54% urban, 46% rural) Literacy: 93% College Education: 75% Life Expectancy: 78.8 male, 79.7 female

*Largest Cities:
Cairo (9,233,000),
Tangiers (7,170,000),
Tripoli (4,155,000)*

*Industrial Capacity: 4
Rudell Units Agricultural
Output: 86%, net importer
of grain and livestock
Mineral Production: 77%,
net importer of metals Power
Production: 87% (21%
solar, 58% atomic, 21%
mineral), net importer of
power Principal Trading
Partners: France, America,
Argentina*

Africa has been a latecomer to the industrial age, fighting always against the many barriers standing between its early days of colonization by European nations and its eventual goal of self-sufficiency and prosperity. The same problems which made the dark continent so impenetrable to European explorers of the 19th century have held it back through the 20th and 21st centuries, relegating most of its nations to poverty. As a proving ground for differing ideologies in the 20th century, Africa became a charity case for the industrial nations. In the absence of a world trade net early in the 21st, the entire continent teetered on the brink of utter collapse. Only the mettle and determination of the Africans themselves, combined with the timely arrival of two separate leaders of vision (Andreas Muhtma of Nigeria and Joseph Mbutuo of Azania—see descriptions of those nations on pages 65-67) and the French Peace, saw the continent through those troubled times. Building on that base Africa has made its climb out of poverty to a position of comfortable progress in the 24th century.

During the world recovery after the Twilight War, Africa was, typically, slow in revival, though actual war damage on African soil was minimal. The world trade net had collapsed, forcing the African nations to rely upon their own meager resources. Disease ravaged the central continent, unhindered by modern medical techniques, and famine swept the arid regions of the northeastern and southwestern nations. Millions perished before a balance was met and competent leadership took hold over much of the land.

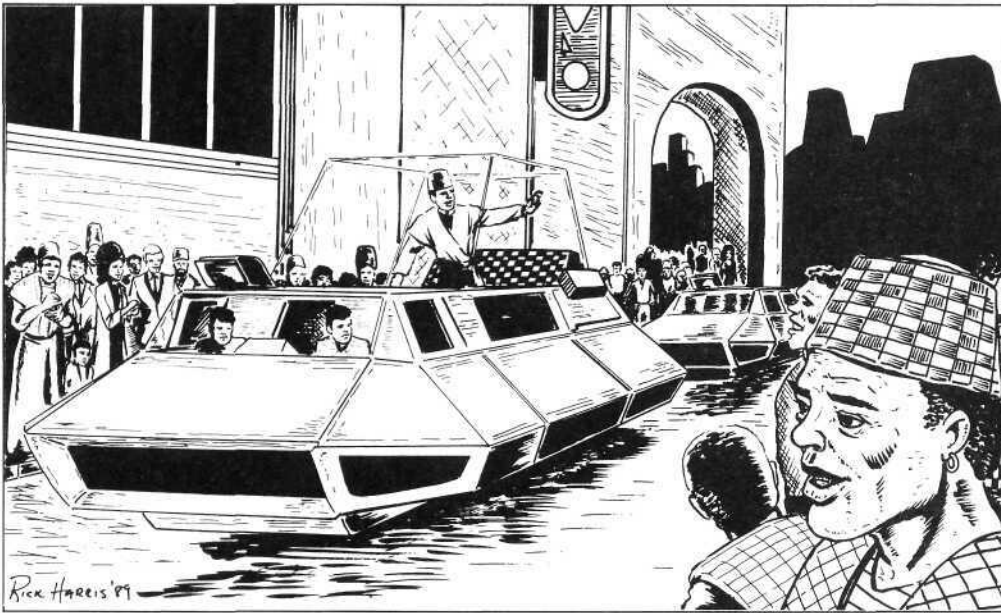
In general, without sufficient resources to industrialize on its own, Africa turned its attentions to more fundamental problems which could be dealt with using the materials at hand. Massive public works programs were instituted to recharacterize the countryside. Dams were constructed on major rivers, aiding irrigation and power production in many areas. The dreaded tsetse fly infestation of central Africa was brought under control. A highway system was developed which, at its conclusion, rivaled any in the world. Entire river systems were redirected, opening much more of the hidden continent to direct water access. Above all, though never unified in ideology or political affiliation, the people of Africa developed a sense of pride in their continent which jostled them out of tribal pettiness and self-doubt, and opened their eyes to a bountiful future.

NORTH AFRICA—THE MIRACLE OF THE SAHARA

The undisputed economic leader of north Africa is the United Arab Republic (UAR). The nation's expansionist policies during the worldwide recovery period of the 21st century saw its domination and takeover of the White Nile regions and Cyrenaico and Tripolitania to its west (Sudan and Libya), making it the single largest nation in Africa. The plan to include several Middle Eastern nations into the republic failed in the face of eased tensions between Israel and her neighbors. Though it has no space travel capacity of its own, the U.A.R. has some interests off-world, including an enclave of over 5000 individuals on the Eber homeworld at 82 Eridani. There is a direct bullet train system between Cairo and Libreville.

In 2179, the UAR, in cooperation with the Japanese and many foreign investors, began an ambitious plan to use newfound weather control technology to alter the rain patterns around the Sahara. They launched six satellites which by 2210 had drastically increased the rainfall in the region, so much so that some flooding was inadvertently caused. In those regions where proper seeding and land management were coupled with this newfound precipitation, the Sahara's dunes and desert pavement terrain have given way to crops, grasslands, and foresting. The technology of the 22nd century has truly made the deserts bloom. Investors in the project have made tremendous returns, and the UAR has finally begun to branch out from its reliance on the Nile.

All other nations of the Sahara have also benefited from the UAR's weather control, but without proper management the effects have been far less impressive. Morocco, Tunisia, and especially Algeria have traditionally been a part of the French camp, though their oil revenues have dried up over the last century. Their large populations do, however, make a comfortable living as members of minor industrial nations.



Polisaria and Mauritania are coastal nations engaged in fishing and some agriculture. Their economies are barely capable of supporting their populations, and emigration to the north along the coast is commonplace.

Berbera is a nation without organization or direction. Its government is incapable of controlling its scattered peoples. Raids are common out of Berbera into Algeria and the UAR, made by desperate bandits in out-of-date equipment, but these are universally recognized as the acts of individuals and not the policy of the nation. Berbera is by far the poorest of the north African nations.

NIGERIA AND THE IVORY COAST UNION

Nigeria is the second most industrialized nation in Africa, behind only Azania in its output of manufactured goods. The nation owes this capacity to the period beginning in the 22nd century when the country found itself unified under president-for-life Andreas Muhtma. Muhtma set the nation on a course toward sophistication designed to make it a leader in Africa and a competitor in the world marketplace. His reforms led to massive public works, the organization of the populace into a unified entity, and the attraction of investment and technical experts from America and Canada. In hindsight, Muhtma was a genius when it came to matters of world politics. He was not, however, a master of population control.

Soon after his death, with the nation standing on the brink of acceptance into the world mainstream, the Ibo and Fulani minorities waged general strikes which brought much of the country's transportation to a halt. Rioting and unrest were barely brought under control by Muhtma's successors before significant damage was done to the economy, but large parts of the cropland were ruined by the rioters, and the food supply was threatened for the next several seasons.

Nigeria organized the French-dominated states of the Ivory Coast into a union of nations under one economic umbrella. Though officially part of the French Empire today, Senegal, Guinea Coast, and Burkina Faso owe their prosperity to Nigeria, not to France. In need of reliable agricultural supplies, overpopulated Nigeria began a program of goodwill which included sharing technology, sharing machinery, and lifting the standards of living in each of those countries, plus their non-aligned neighbor Mali. Resistance in the union nations was based upon fears that annexation was Nigeria's next step, but those fears have never been realized. The relationship between the Ivory Coast Union nations and Nigeria is a model for both Africa and the world.

Nigeria has no actual holdings outside of Earth. It relies on the nearby beanstalk for both interface trade and for power production.

NIGERIA AND ITS NEIGHBORS' STATISTICS

The countries of the Ivory Coast are: Nigeria, Guinea Coast, Burkina Faso, Mali, and Senegal.

Population: 281,021,000 (63% urban, 37% rural) Literacy: 94% College Education: 78% Life Expectancy: 78.9 male, 81.1 female

Largest Cities:
Lagos (10,127,000),
Accra (5,723,000),
Freetown (4,199,000)

Industrial Capacity: 11
Rudell Units Agricultural
Output: 102%, net exporter
of grain Mineral Production:
120%, net exporter of baux-
ite and iron Power Produc-
tion: 57%, net importer of
power (beanstalk grid) (56%
solar, 0% atomic, 44%
mineral) Principal Trading
Partners: America, France,
Azania

FRENCH CENTRAL AFRICAN STATISTICS

French Central Africa consists of Biafra, Cameroon, Chad, Gabon, Katanga, Ubangi Shari, and Zaire.

Population: 428,217,000
(73% urban, 27% rural) Literacy: 78% College Education: 41% Life Expectancy: 75.1 male, 78.8 female

Largest Cities:

Libreville (17,840,000), Kinshasa (11,450,000), Brazzaville (7,774,000)

Industrial Capacity: 12
Rudell Units Agricultural Output: 82%, *net importer of grain* Mineral Production: 77%, *net importer of metals* Power Production: 210%, *net exporter of power (beanstalk grid) (100%, solar, 0% atomic, 0% mineral)* Principal Trading Partners: *France, America, Japan*

FRENCH CENTRAL AFRICA

Those nations at the feet of the great beanstalk are arguably those benefiting from it the least. French Central Africa can boast the most impressive city on Earth, Libreville, and sufficient commerce to link the Earth to her far-flung colonies, but its nations show the scars of long-term colonial status more than any others in Africa.

Libreville is a corporate haven. Every major business, industry, bank, and foundation has offices here, all in the modern sleek sky-needle design which has come to symbolize the beanstalk and its power. Surrounding this core of ultimate business are the residential estates of managers and executives from around this world and from the distant colony worlds. The central portions of the city are a millionaire's paradise, with accommodations and excesses at his fingertips, the benefits of wealth around every turn.

But the modern cityscape and Earth's most luxurious homes stand in stark contrast to the miles and miles of slums which surround Libreville and every other great city in the region. Without direction, without national pride, largely without education or skills, the masses of central Africa have descended upon the cities in search of jobs and progress. The helping hand of French imperialism has thus far been more than accommodating to the businesses eager to take advantage of the elevator to the stars, but it has done almost nothing to better the condition of the poor and uneducated beneath it. In the terminology of the day, the French are prepared to climb to the stars, regardless of the number of African bodies they must stand on in order to do it.

Regardless, Libreville is the heart of Earth's multi-world civilization. At the economical interface point between homeworld and colony, the city has grown to facilitate the enormous traffic in cargo, people, and information befalling its position. Its port is the largest on Earth, capable of handling hundreds of seagoing cargo vessels at a time. International space plane and jet aircraft ports dot the countryside around the city. Africa's rail and road nets converge on Libreville, and their traffic is the pulse beat of the continent's commerce.

Though not actually parts of the French Empire, Biafra and Ubangi Shari are heavily influenced by it. The entirety of French Central Africa is the population base of the empire, though, as in the days of colonial status, its wealth is stripped and sent abroad through the lead city of Libreville. Other cities, such as Kinshasa, are terribly overcrowded, underdeveloped, and in constant turmoil. Their unrest is felt through the region as French police and military forces clash with dissatisfied mobs of imperial citizens. The true price of empire is in the constant street battles of Zaire, Gabon, and Cameroon.

AZANIA AND HER SATELLITES

Azania's history is a troubled one. Colonial tensions between British and Afrikaner settlers set the stage for the isolationist and racist state of South Africa, whose policies separated the white and black communities there absolutely. The eventual breakdown of that government and the emergence of black power would have certainly led to terrible conflict were it not for the intervention of a single leader with vision, Joseph Mbutuo.

Born on a collective farm outside of Lesotho, Mbutuo's Zulu roots guided his youthful energies, letting him get involved in street violence directed at those outside his tribe and race. Felled by a government bullet at 16 years of age, he experienced a transition in life. His recovery in a charity hospital allowed him time to read extensively and become a devout humanitarian. Influenced by many humanitarian thinkers, Mbutuo travelled widely in South Africa, preaching nonviolence and a peaceful transition of power. When that transition came prematurely, his influence on the populations, both white and black, helped ease the tensions and limit the conflicts. His longevity (Mbutuo died in 2075 at the age of 112) did much to calm the entire transition period.

However, all of Mbutuo's teachings could not erase the many generations of separation imposed on the populations of South Africa, and the Azanian nation, conscious of this, merely let social differences take their course. Today, white Azanians are strictly second-class citizens, relegated to lower-paying jobs, the subject of distrust and sometimes abusive law enforcement, and most often isolated in small minority communities. Azanians of Indian or Oriental descent fare little better in the eyes of the massive black majority. However, emigration is not restricted, and many who can afford it leave Azania for jobs elsewhere. Interestingly enough, a large part of the

armed forces and many diplomatic core positions are filled by individuals from Azania's minority races.

Recognizing the tremendous power of the French in central Africa, Azanian administrations in the 22nd century set about creating a buffer zone of satellite nations along Azania's northern frontier. The nation of Angola, fought over for more than a century between guerrillas and other powers, was very easily persuaded to come under the umbrella of Azanian protection. Zimbabwe and Zambia, on the other hand, are merely controlled politically. There are no Azanian troops in those two nations.

Today, white Azanians are strictly second-class citizens, relegated to lower-paying jobs, the subject of distrust and sometimes abusive law enforcement, and most often isolated in small minority communities.

Azania's entrance into the European Space Agency was based solely in the politics of tantalum. The nation has cleverly played upon its resources of that precious element to gain a large foothold off-world. Tundukubwa, its oldest colony, at Alpha Centauri, is extremely populous and productive, so much so that its dependence on its mother country is sometimes in doubt. Kimanjano is a terrific way station on the French Arm with an extensive polycarbons industry to boot. The growing Azanian colony on Joi, Lubumbashi, is barely getting its agricultural base established.

MOZAMBIQUE—THE NATION THAT TANTALUM BUILT

The morning of 18 August 2080 found the poor people of Mozambique struggling to survive through the fifth straight year of bad weather and meager crops. Their government had again failed to come to terms with rebels terrorizing the countryside, and another coup seemed imminent. Of course, that was also the morning that the story broke: France had the secret to faster-than-light travel, and it centered on the rare element tantalum. The illiterate villagers of Mozambique would soon come to realize that the rich nations of the world would bargain mightily for the unseen metals beneath their unshod feet. Mozambique's large proven reserves of tantalum, the largest in the world, quickly propelled the nation into the forefront of world trade. The coup, of course, went off as planned.

The struggle for the government, to become the government which spoke for the as-yet-unmined tantalum, nearly tore the small country apart. With the price of tantalum skyrocketing every day, new rivals emerged, factionalizing the country into hundreds of separate parties and groups. Unrest abounded, and the influence of external powers was felt in the smallest villages. Finally, an offshoot of the original government seized power with the help of French peacekeeping forces. That government has been in power ever since.

The riches bestowed upon Mozambique were immediate and numerous. Japan set up a complete hydrogen power net for the nation, bringing free electrical power to every city. The government doled out grants to individuals as large shopping facilities sprang up in the larger towns. For the first time, the commodities of the world were openly available and affordable by everyone. In a matter of a few years, Mozambique changed from a backward, starving country to a thriving commercial center. Mozambique has since been among the top 10 nations with regards to per capita income.

The cultural shock has been felt, however. A nation with so little, propelled into luxury, saw its population lose much of its heritage and identity virtually overnight. Social stress took the form of rioting and unrest, but opposition to the rapidly changing times died quickly. People worked into their new roles as businessmen and jobholders fairly easily; historically, the transition could have been much harder.

Mozambique remains one of the richest nations on Earth. Maputo has become an important world financial center.

STATISTICS OF AZANIA AND ITS SATELLITES

This group of nations includes Angola, Azania, Zambia, and Zimbabwe.

Population: 266,377,000
(65% urban, 35% rural) Literacy: 97% College Education: 83% Life Expectancy: 79.3 male, 82.4 female

Largest Cities:
Johannesburg (7,143,000),
Cape Town (6,688,000),
Durban (5,832,000)

Industrial Capacity: 18
Rudell Units Agricultural
Output: 102%, net exporter
of grain Mineral Production:
217%, net exporter of
precious metals, uranium,
and diamonds Power Pro-
duction: 100% (66% solar,
21% atomic, 13% mineral)
Principal Trading Partners:
Japan, France, Argentina

MOZAMBIQUE STATISTICS

Because of the essential effect of tantalum on its development, Mozambique must be considered separately from any other nation.

Population: 122,677,000
(54% urban, 46% rural) Literacy: 78% College Education: 56% Life Expectancy: 77.5 male, 78.5 female

Largest Cities:
Maputo (5,739,000),
Beira (3,552,000),
Quelimane (2,017,000)

Industrial Capacity: 3
Rudell Units Agricultural
Output: 88%, net importer
of grain Mineral Production:
98%, net importer of metals,
net exporter of tantalum
Power Production: 108%,
net exporter of power (74%
solar, 26% atomic, 0%
mineral) Principal Trading
Partners: France, Manchuria, India

EAST AFRICAN STATISTICS

The countries of East Africa are Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Somalia, Tanzania.

Population: 578,670,000 (77% urban, 23% rural) Literacy: 98% College Education: 77% Life Expectancy: 81.5 male, 83.5 female

Largest Cities:

Addis Ababa (8,235,000), Mogadishu (6,876,000), Nairobi (5,027,000)

Industrial Capacity: 32 Rudell Units Agricultural Output: 96%, net importer of grain Mineral Production: 111%, net exporter of minerals Power Production: 75%, net importer of power (beanstalk grid) (21% solar, 60% atomic, 19% mineral) Principal Trading Partners: Japan, India, Manchuria



EAST AFRICA—POLITICALLY DIVIDED, UNIFIED BY PROGRESS

No two nations in the region of East Africa are politically tied. Each is a unique nation with separate government bodies, separate trade agreements, and different international relationships. From the member of the French Empire, Djibouti, to the model nation of Kenya, each has its own identity. The only way in which they can be likened is in their amazing progress in the last two centuries to positions of power along the west coast of the Indian Ocean. To speak in generalities, these nations have taken advantage of Africa's newfound wealth to set up moderately strong economies and an industrial base.

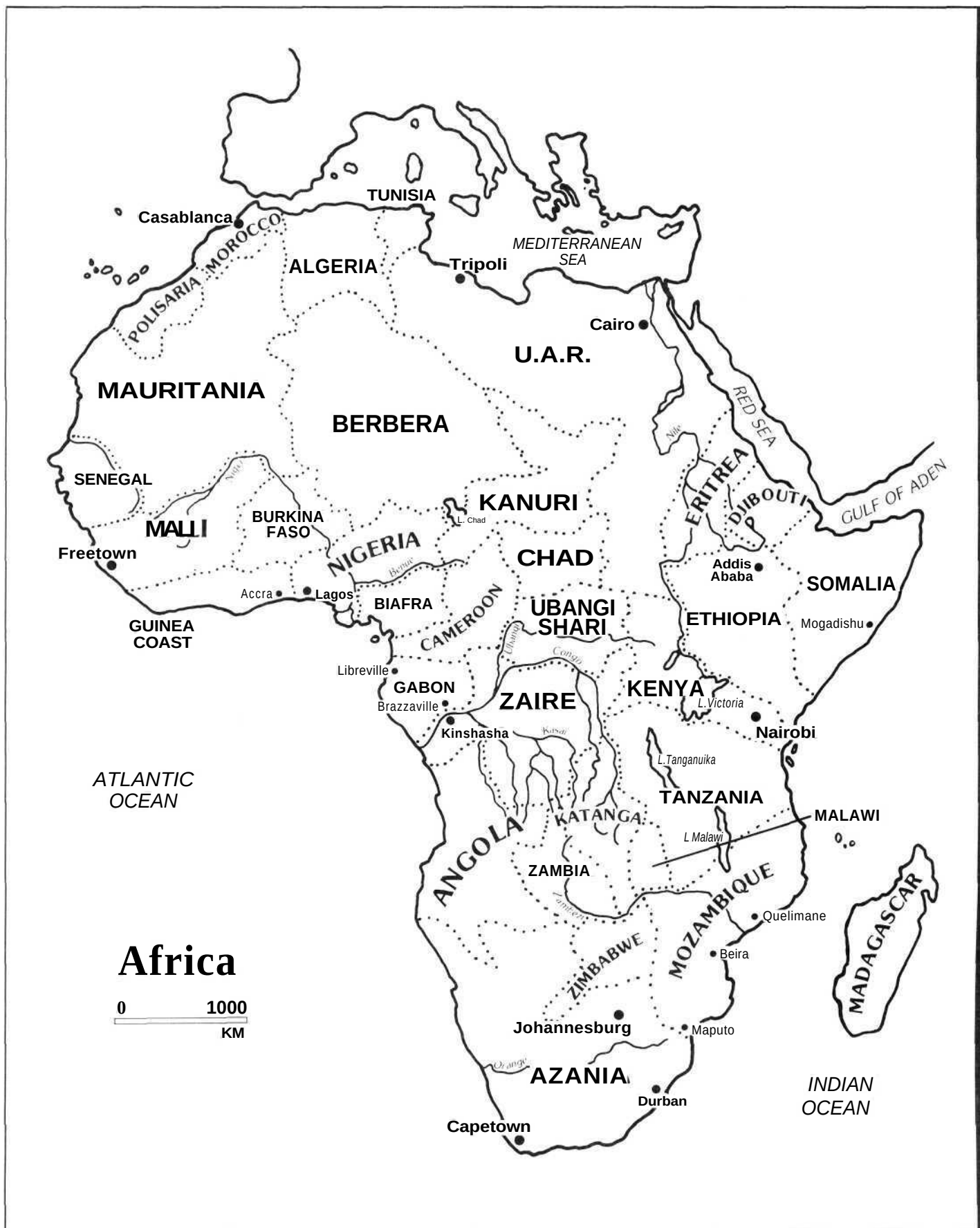
Each took different paths. For instance, Tanzania took advantage of her iron and precious metal reserves, Ethiopia capitalized on its large population, Kenya on its tourism trade and agricultural foundations. But regardless of its origin, every nation steadily built its way out of the Third World into the mainstream of industrial nations. When Ethiopian civil war spilled over into Kenya and Somalia in the 2070s, a period of sporadic border clashes and major conflicts erupted, lasting for more than 20 years. Finally, the nations settled down into a divided Ethiopia (Eritrea formed with its capital at Asmara), and the slightly displaced nations of Kenya and Somalia.

In general, the populations of the east African nations enjoy a progressive lifestyle. Jobs generally pay well, and the local currencies hold up well on the world market. Trade is healthy and international travel is commonplace. The one exception to this is Madagascar, where progress has been somewhat slower in coming. Madagascar is roughly 50 years behind her neighbor nations in economic growth, but the seeds are most definitely in place.

THE BEANSTALK POWER NET

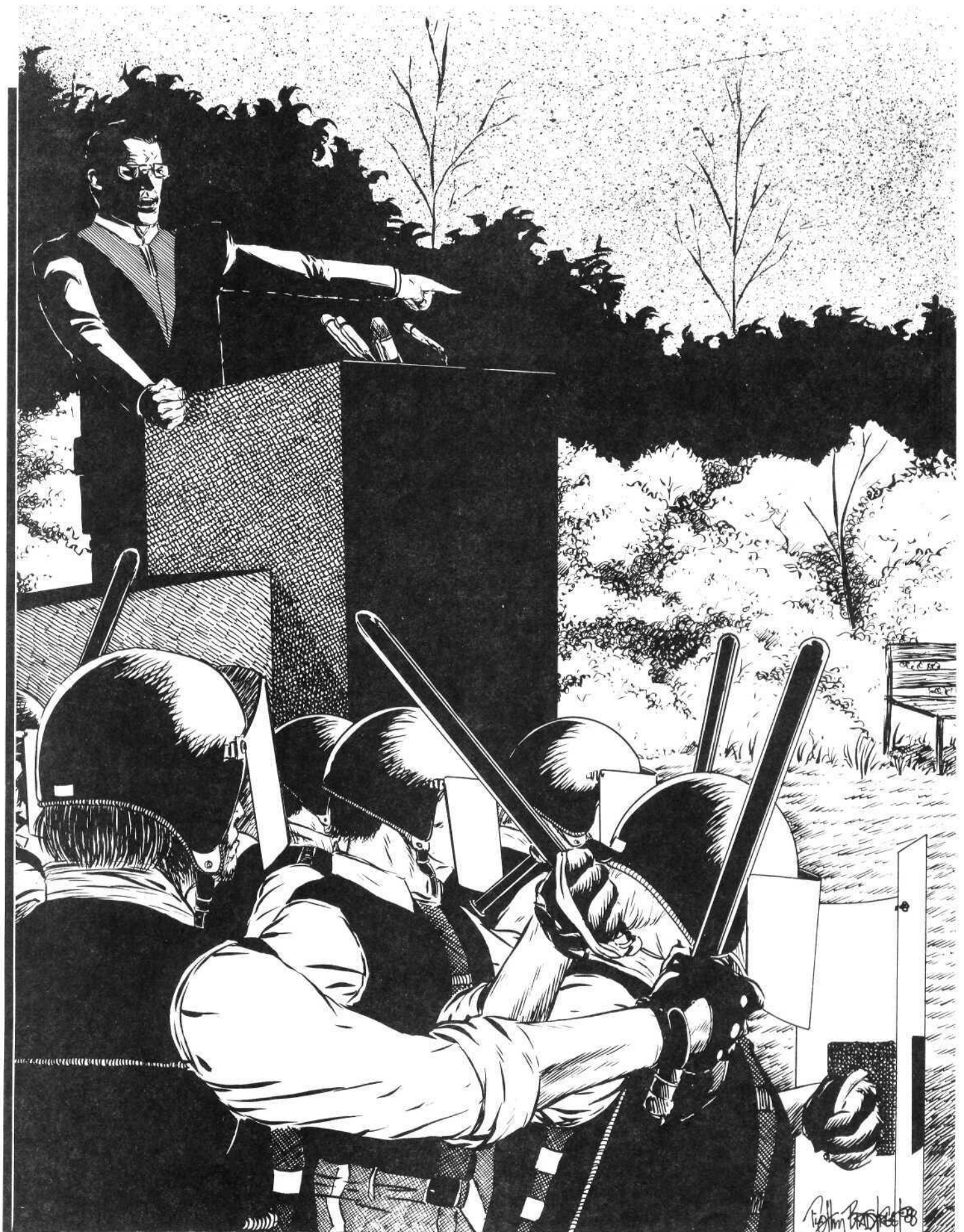
The upper reaches of the beanstalk are lined with supersensitive solar collectors, turning with the giant cable through the bright sunlight outside of Earth's atmosphere. Though a tiny thread connecting the surface to orbit, there are literally miles and miles of solar panels built into its structure, gathering megawatt after megawatt as the beanstalk sweeps through the daylight. It is estimated that the power collected by the beanstalk is roughly the equivalent of 20 operating nuclear power plants, far more than the beanstalk or Libreville-Gateway need for their operation.

The plan to place such a coverage of panels on the beanstalk stems back to the early days of Nigerian industrialization. The potential for cheap solar power on the beanstalk's surface intrigued the government of Nigeria, and to a lesser extent those of the east African nations. A power grid was proposed to build Africa's power supply, and thus its ability to compete in the world community. The power grid was completed two years after the beanstalk itself went into operation.



Africa

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KM





Cyberpunk: An Introduction

WHAT IS CYBERPUNK?

Cyberpunk is the term given to a particular genre of 20th-century science fiction. It is coined from two different words: "cybernetics"—the science of electronic, mechanical, and biological control systems—and "punk" referring to modern street culture. The sense of the combined term is of ultratechnology grafted onto the culture of the street. The theory is that technology is changing so fast that each new discovery is old news before we have even had a chance to consider its implications.

The effect of that technology is a culture shock that not only separates one generation's ideals from the next generation's, but actually shakes the next generation's ideals as fast as they are formed. Mixing genetic material from animal to animal, or even from human to animal; raising crops of human embryos for organ transplants; creating machines that think like humans and humans that think like machines. All of these things, and more, are within our grasp. The problem is that they all tear at the definition of what it means to be human. And without that definition, we have no inherent basis for human rights.

That is the realm of cyberpunk: to explore what it means to be human, or inhuman, in the world of the future.

The information given in the preceding chapters presents the traditionalist's way of describing Earth in 2300. It focuses on the unity that has been achieved among the nations, and the comparative wealth and safety that Earth's inhabitants enjoy. But there are always alternative ways of describing things, and there are always places where the norm does not apply.

A CYBERPUNK VIEW OF THE 24TH CENTURY

The Roman Empire became unwieldy, and so it fell to the barbarians waiting outside its borders. Our world's society has also lost its edge, but it has nowhere to fall. It is strung up artificially by a supporting web of multinational corporations, far-reaching computer networks, and technologically defended nations that cling to outmoded ideologies and sociopolitical frameworks like drowning men clinging to the flotsam of the past. At their insistence, this outdated society will continue to bind the peoples of the world well into the future, with different nations, corporate-states, and organizations all vying for a better cut of the same deal, none daring to take the big chance, to risk the big loss and let a new world order emerge.

Science and technology, on the other hand, march on. If anything, their drummer has quickened his tempo. New discoveries are being made daily in fields that only recently did not even exist. Crimes that were not even imagined 15 years ago are being tried in courts today. The teenage computer pirate, the researcher who knowingly releases an engineered virus: both are examples of the technological shock wave that has overtaken us. For that matter, even the definition of "humanness" has lost what meaning it once had, as the sciences of genetic engineering and cybernetics blur the boundaries between people and the products they create. New technologies hit the street before we can explore their ethical implications. In the chaos that results, society has no time to think, only to respond. Ethics take a back seat to survival, and while the masses continue in their traditional ways, humanity's quickest and deadliest are propelled to the top of the heap. These are the people who thrive on the raw edge of tomorrow's possibilities—they include corporate climbers and the bionically enhanced warriors who serve them, rock-and-roll rebels who struggle to change the system, and high-tech parasites who scavenge what they can from it.

The Corporate Climbers

To these people, the corporation is everything. National allegiances, family ties, and simple morality are all sacrificed to the service of a megacorporation, because that corporation in turn gives power to its members. Corporate climbers always look for the advantage to be gained in a situation, and if none exist, they cut their losses and run. Stepping on the people below them on the ladder and back-stabbing those above to make room for advancement, corporate climbers claim to view life dispassionately, realistically; but how they howl when they are the ones brought low.

The corporations that these people serve typically fall into one of two categories. The first category is of organizations that have simply grown so large that they have left any national or cultural heritage behind. These are the megacorporations; they feel no duty toward the societies in which they operate—their only measure of success is monetary profit. The second category is of the smaller corporations that have, at some point in their past, been taken over by a criminal syndicate. Nearly every nation on the globe has a far-reaching syndicate of crime, whether it be Italian or American Mafia, Japanese Yakuza, or another. As with the megacorporations, in these smaller corporations money is the measure of success, but personal ties within the corporation are very important as well.

The Bionic Warriors

Like warrior-knights, Japanese samurai, and Ninjas, there is a multitude of men and women in the 24th century who hire themselves as mercenary troops, bodyguards, and corporate assassins. Many have been genetically, surgically, or bionically tailored to give them more of an

edge for survival. Since such procedures are usually illegal throughout most of Earth's nations, these warriors have typically made deals with corporations, governments, or underworld clinics to gain their enhancements. The costliness of such deals is often tantamount to slavery, and these warriors almost always seem somehow less than human as a result of sacrificing any ideals they may have had in order to gain their superhuman physical abilities. Only their honor—their dedication to their contracts—gives meaning to their lives. If they break a contract, they become untrustworthy to their masters, and with their enhanced abilities, they will be judged too dangerous to continue living.

The Rock-and-Roll Rebels

In this category are included all of the artists who seek to bring about a change in their societies. Some are authors, others painters, but most are musicians, because they can make the closest contact with the greatest number of people in public concert. While many perform for the money or the fame, others follow a cause. They may attack governments, or they may battle corporations, but always they do it using the power of mass appeal. In many ways, they are demagogues, communicating dissatisfaction with the status quo and desire for something new through the power of song or art.

The Eloquence statistic is very important to this type of character. For authors, the Writing skill would also be necessary. Also, the referee may wish to add Singing and Painting/Drawing to the list of General Skills in the basic game rules. The effects of the skills are easy to imagine.

The Technological Scavengers

Terra's ultrarich maintain their power through knowledge: knowledge of supply and demand, of others' weaknesses, and of the ultimate in technology. All of these give an edge on the competition and keep a person at the top. And thousands of people make their livings by scavenging this knowledge. Some pick it up as it is cast off and use what they can before it becomes common knowledge; others go further and steal it from its owners before they *realize* it is gone. These are the cyber hackers—deck jockeys who plug their minds directly into Terra's computer net and risk their lives and sanity attempting to break through security programs and steal protected files. Like rats, they flash through cyberspace, slipping through the chinks in DOS towers and running the mazes of information inside, looking to score anything that they can sell.

Their decks are specially designed for speed, stealth, and power. Often they design or modify those decks themselves, using black-market electronics created according to plans stolen by another cyber jockey in his run on a military or megacorp system, or depending upon a flash of inspiration of their own. Cyber hackers, cowboys, deck jockeys—the names attributed to them are many. The things that characterize them all are an excellent grasp of computer capabilities and a love for the speed of cyberspace action.

RUNNING CYBERPUNK ADVENTURES

One thing central to cyberpunk stories is the rapid pace of action. The assumption is that new technology hits a culture too quickly to be integrated, and that people learn to react quickly or die. An excellent way to carry this atmosphere over into adventures is to work toward a sensory overload for the player characters. Although they may have time to plan early on, once they begin to act, events should begin happening so quickly that they players will seldom have time to think things through. Even their early plans might be interrupted by events that happen behind the scenes.

It has been mentioned elsewhere that Western societies in 2300 all show a fascination with 20th-century styles and cultures. Also, almost all cyberpunk action will take place in the heart of urban areas. These two facts can serve a *referee* wonderfully in keeping an adventure moving at a hectic pace. Use them to create sensory overload. When the player characters enter the streets, the referee can layer their senses with the mix of clothing styles, storefront decors, and flashing hologram advertisements. Don't let them stand still. The police copter looming directly overhead, the man in the 1930s double-breasted suit and mirrored contacts, the woman in the leather skirt and orange mohawk, and the click of a switchblade behind them can all serve to move the characters along. A preprepared list of random events fleshed-out and ready-to-use can lend reality to these descriptions. Soon your players will get the message: Pick a goal and keep moving.

CYBERPUNK SOURCES

The following is a sampling of some of the best books and movies in the cyberpunk genre. They can help you to develop a feel for running a cyberpunk campaign in **2300 AD**.

Books

Neuromancer by William Gibson

Count Zero by William Gibson

Burning Chrome by William Gibson

Mirrorshades: The Cyberpunk Anthology by Bruce Sterling

Wired by Harry Hellerstein

Movies

Blade Runner

The Running Man

Max Headroom



Bionics

Task: To continue on Tessaron Beta therapy: Difficult. Endurance. Instant.

Referee: If a character fails this roll, he will immediately suffer 1D6 Light Wounds (no specific location) as the result of violent muscle spasms.

Surgical, chemical, and bionic enhancements are largely illegal in the 24th century. This has partly been the result of the counter-reaction to the Provolutionist stance. But in general, few governments want to deal with the problem of enhanced human beings, unless, that is, those enhanced human beings are agents of the government itself.

There are, then, few places that a character can go for such enhancement. One source would be a government or megacorporation recruiting potential agents. The problem with this is that such a government or corporation would require complete allegiance after the enhancement, likely enforced by some sort of self-destruct implant for use if the agent were to stray from the fold. A second source of such enhancements is the black clinics. These are underground businesses that will implant black-market bionics and perform illegal surgeries for a price.

THE BLACK CLINICS

Some of the items for sale through black clinics are stolen from governments or megacorporations that would prefer it never be known that they ever developed the items in the first place. Other items are developed at the clinics themselves. But the majority of what is offered for sale comes from Provolution laboratories. In order to understand how the black clinics operate, it is helpful to be familiar with the origin of Provolution and with its current status.

In the beginning, the goal of the Provolution scientists was to accelerate the evolution of humanity. After the movement was forced underground, its goal became the destruction of the "narrow-minded" governments that were trying to destroy it, and its evolutionary research was demoted from an end to a means. The black clinics were created in the wake of the Provolutionists' research, where their powerful, albeit not totally legal, techniques were mostly used to cure the most horrible of disabilities and disorders—at a price.

Because of the illegality of the work done in them, black clinics must maintain a high level of secrecy. They are typically located in remote areas of the country or in the most unlikely sections of big cities. Some clinics are designed to be mobile and can turn a small family dwelling into a high-tech medical facility in less than six hours. Others keep their locations secret simply by sedating the patient at a pick-up point, taking him to the clinic for the actual surgery, then returning him to the pick-up point before he regains consciousness. Usually the clinics are just what they seem to be: underground medical labs which do special and expensive work for those who want or need it. Many, however, are operated by the Provolutionist movement in order to generate capital. As the clinics are fond of their privacy, a player character should have considerable difficulty contacting one (one or two adventure sessions could be spent in making first contact). Care must be taken when seeking out a black clinic—an improper approach is a good way to become an involuntary organ donor.

Once contact has been made, it is important for the player character to keep firmly in mind who he is dealing with. The black clinics play for keeps. If a character defaults on paying off a pair of bionic eyes, he may be discovered in an alley with them torn out of his head. Also, since the clinics, at best, deal with the Provolutionists and, at worst, *are* the Provolutionists, and the Provolutionists put very little value on a single human life and great value on their long-term goals, a player character can never be too sure just what the doctors are taking out—or what they're putting in—while the character is under anesthetic. And the clinic is not likely to still be there if the character wants to complain later.

STATISTIC-MODIFYING THERAPY

The following procedures can be performed to modify a character's basic statistics. If the character is paying for them (as opposed to having them performed by a government agency, for example), the prices listed should be used.

Muscle Implants: This technique involves taking a muscle tissue sample from the character and cloning it in a collagen tank, then grafting these new muscles into the existing tendon/ligament system of the character. The technique will increase a character's Strength by up to six

points, but for each point of Strength gained, the character will lose 1D6 points of Dexterity until he has had time to become used to the new muscle mass. To regain those points, the character must spend experience points as if he were improving a related skill in his career.

Installing muscle implants is time-consuming, demanding one month of physical inactivity from the patient. It is also expensive, costing Lv1200 per point of Strength gained.

Tesseron Beta: Tesseron Beta is a drug that stimulates the endocrine system, causing increased production of strength-producing hormones. It is administered in a weekly dose and must be taken continually to keep up its effect. When a character first takes T-Beta, it will have no immediate effect. With the second dose, the character must roll successfully for the task in the sidebar to continue the therapy. With the third dose, the character will gain from 1 to 3 points of Strength (1D6/2). This added Strength will drop by one point per week, unless further doses of the drug are taken to maintain it at its present level.

Should a character decide to quit T-Beta after more than two weeks of use, he will suffer some withdrawal effects. Each week when the character's enhanced Strength drops by one point, the character will also lose one point of Dexterity due to muscle twinges. Once the character's enhanced Strength has worn completely off, his Dexterity will begin increasing by one point per week until it reaches its natural level.

The cost per dose can range from Lv50 at the Core to Lv300 at the far ends of the Arms.

Neural Sheathing: This technique utilizes viruses which have been engineered to manufacture and deposit certain organic chemicals around the nerve fibers of a character. The plastic-like sheath decreases the electrical resistance of the nerves and various outside electrochemical interferences to neural communication. To perform the process, a doctor takes samples of blood, nerve tissue, and spinal fluid from the patient and determines what support chemicals are required for the viruses to perform properly. The process must be monitored for one full month, with a medical appointment every three days to update the support solution.

The doctor must make 10 successful Simple task rolls while incurring no major or total mishap (see the task in the sidebar). For every day the character is late for an appointment, the doctor's task goes up one category (Simple becomes Routine, Routine becomes Difficult, etc.) so it is important to be prompt for appointments while undergoing this treatment.

If a major mishap occurs, the sheathing is lost, but the process can be retried. If a total mishap occurs, the character permanently loses one Dexterity point, and the process cannot be retried, as the character's nerves are permanently coated in a mass of what is technically termed "goo."

If the process is totally successful, then the character's Dexterity is raised by 1 to 3 points (1D6/2). The process can only be performed once. The cost for this treatment is Lv3000.

Chargers: Chargers are devices that are used to store some of the endorphin that the character's body naturally produces. The endorphin is saved for re-introduction into the body when needed to add extra oxygen to, and remove fatigue toxins from, the character's bloodstream. The charger is installed in a space made by removing all or part of one kidney. Chargers can add 2 or 3 points to the character's Endurance, depending on the level of charger purchased. A supercharger will increase a character's Endurance by 2 points (and requires removal of half the kidney); a hypercharger will increase it by 3 points (and requires removal of an entire kidney). Ectomorphs may not have a hypercharger installed, due to the comparative bulk of the unit.

Superchargers cost Lv1500; hyperchargers cost Lv4000.

Vassopressin-Y: This drug allows the human brain to modify its electrical pathways, which will make it easier for a character to learn new things and recall things which he has already learned. Due to its addictive effect, this drug is usually used by people who are beginning major projects (computer programs, spacecraft design, and the like) and can quit after the project's completion. The drug must be taken in a daily dose for two full weeks for any effect to occur, at which time the character's Intelligence score will be raised by 1D6 points. If the character remains on the drug for one month or less, he will suffer no side effects. For every month thereafter that the character remains on the drug, he will suffer the loss of 1D6 points of Determination, regained at the rate of 1 point per week after no more Vassopressin-Y has been taken. If a character's Determination reaches zero, he will slip into a catatonic state. To quit taking Vassopressin-Y, the character must roll for the task in the sidebar.

The drug is bought in weekly doses, which cost from Lv50 per week's dose in the Core to Lv200 in the Arms. Due to the inherent dangers in this drug, it is illegal in many nations/systems, and its cost there could be as much as Lv800 per week's dose.

Task: To create neural sheathing (Hazardous): Simple. Medical. 25 minutes.

Referee: The hazard of this procedure applies to the patient, as explained in the main text.

Task: To break Vassopressin-Y addiction: Routine. Determination. Instant.



IMPLANTS

One of the results of increased knowledge about the workings of nerve cells has been the development of a technology by which human nerves can be linked to electronic devices. In this way, the biochemical process of a thought can be translated into action by a machine. Some of the major devices in which this technology is used are described here.

Neural Jack

The neural jack is one piece of bionic equipment that is totally legal throughout human space. It is an electronic socket wired to a character's brain, allowing that character to plug cable connections into a piece of equipment in order to control that equipment by thought. The jack can also be used as an access point for certain types of software that expand the character's memory, as with a chip inserted into a computer. Only one jack can be worn by a character.

When jacked into a piece of equipment, a character's control of that equipment will be both quicker and more accurate than if he were using manual controls. A jacked character treats any task rolls involving the use of the equipment as if they were one difficulty level lower than listed—Routine becomes Simple, Impossible becomes Formidable, and so on.

The major drawback to being jacked is that the character is so tied into the equipment's control system that he becomes almost insensible to control of his own body. Any tasks requiring the character to use his own body while jacked into a piece of equipment are treated as if they were one difficulty level higher than listed.

The other drawback of jacking is the relative lack of things to plug into. In the Core, less than 10 percent of the civilian motor vehicles are equipped for jacking, and only 25 percent of the civilian computers are. In the Arms, the percentage of jacked equipment to be found is almost zero. In all of human space, military equipment is about 30 percent more likely to be jacked, as the military is where the most advanced equipment tends to first be used. Approximately 35 percent of all military starships have work stations that are jack-equipped, and the vast majority of them are to be found in the Core. The largest and most independent of megacorporations also have some jack-equipped resources, primarily combat equipment.

Almost any piece of equipment *can* be jacked for about 50 percent of the normal price of the equipment. In the case of jacked firearms, the price of the jack is closer to 100 percent of the weapon, as signals are not only sent from the user's mind to the trigger mechanism, but also from special sensors on the weapon's sights to the user's mind. In effect, a jacked gunner sees through the weapon's sights (even without the weapon at eye level) and, as a consequence, he is able to aim more accurately than a non-jacked gunner who visually sights down the barrel.

The cost of having a neural jack installed in a character is Lv7500. At the time of installation the player must decide where the jack will be located on the character, the most common places being at the temple or on the forehead (for ease of access), or in the hollow at the nape of the neck (where it can be hidden by hair or clothing).

Chipped Skills

As mentioned above, a neural jack can serve as a receptacle for software that expands a character's memory. This software is usually called a "chip," and the information it contains is called a "chipped skill." A chipped skill will lend a character knowledge of some field he does not already know or knows less about than is contained on the chip, but it can only give him basic knowledge in that skill. For example, a person with the aircraft pilot chip would "know" how to make a plane climb, dive, and turn, but would not know how to combine these maneuvers to win dogfights.

Any skill from the basic game rules can be chipped. Chips typically contain information equivalent to a level 0 or 1 skill. Some very rare chips even contain knowledge equivalent to a skill level of 2. As long as a character has a chip plugged into his neural jack, he is considered to have the skill level contained on the chip. In other words, the chip's skill level is not additive with the character's skill (if any), but is used instead of the character's skill level. Once the chip is removed, the character returns to his normal level in the skill. It takes approximately 30 seconds to insert or remove a chip.

Characters can eventually learn a skill from a chip if they spend enough time with it plugged in. In such cases, the referee should simply consider the chip as an official training program and



SUBDERMAL WEAPONS AND SECURITY SYSTEMS

Just because a weapon is hidden does not mean it cannot be detected. Subdermal weapons may pass a visual scan, and since most are made of nonmetallic materials, they will not set off a metal detector. But a sonogram or X-ray scan will reveal their presence.

have the character spend the normal experience point costs to acquire the skill, as described in the basic **2300 AD** rules. *Price:* Lv1 00 for skill level 0, Lv300 for skill level 1, Lv950 for skill level 2.

Subdermal Weapons

If your characters are tired of getting caught off-guard, or if they have found that carrying a concealed weapon leads to unwanted suspicion from the law, subdermal weapons could be just the thing they need. Such weapons are very difficult to detect, cannot be taken away (short of surgery), and cannot be dropped.

Slashers: Slashers are small, retractable, carbon-filament blades that are installed in the first joint of a character's fingers and protrude at the character's will from under his fingernails. They are not quite as deadly as a knife, but what they lack in length, they make up for in the element of surprise. *Length:* 2 cm (Bulk = 0) *Weight:* Insignificant *Melee Range:* Short *Melee Skill Modifier:* + 1 *DP value:* 0.1 (all five blades collectively) *Price:* Lv1500.

Wrist Blade: This weapon is a 20cm-long, 2cm-wide retractable carbon-filament blade implanted into a character's forearm in such a way as to be extensible through the back of the wrist. The exit point for this weapon can be detected by a careful examination of the character's hands. *Length:* 20 cm (Bulk = 0) *Weight:* 1 kg *Melee Range:* Short *Melee Skill Modifier:* +2 *DP value:* 0.1 *Price:* Lv1200.

Monofilament Garrote: The monofilament garrote is a microthin wire with one end connected to a character's hand and a weight at the other end. It is generally housed in a false finger joint, but may sometimes be mounted in the wrist. With the wire extended (up to one meter) the user swings the weight to bring the wire into contact with his target. The wire is virtually unbreakable (it has an armor value of 1.5) and will cut through even hardened steel. Considerable training is required before an operator can use the weapon without looping it back upon himself (unlike other combat, a roll of "1" counts as a fumble, and any mishap is treated as an attack upon the user). These weapons are so illegal that law enforcement personnel in most locations have instructions to shoot to kill when they encounter the owner of one. *Length:* 100 cm (Bulk = 4) *Weight:* Insignificant *Melee Range:* Long *Melee Skill Modifier:* - 4 *DP value:* 1.5 *Price:* Lv3600.

Wrist Gun: A wrist gun is a weapon mounted within a character's forearm which pneumatically fires small tranquillizer darts from its four-round clip. To reload the weapon, a character requires about 10 minutes of relative peace. The wrist gun, like the wrist knife, is detectable under close scrutiny. *Length:* 10 cm (all internal) (Bulk = 0) *Weight:* Insignificant *Aimed Fire Range:* 50 m *ROF:* 4 *DP value:* 2 (stun only) *Price:* Lv900.

BIONICS AND LAW

In the heart of many of Terra's biggest cities, police forces will often ignore a character with bionic limbs, even if there is a suspicion that the limb might conceal an illegal weapon. In general, the police in these areas follow a policy of not looking for trouble. But if the police find themselves drawn into a confrontation with a character who obviously has any bionic equipment, legal or illegal, those police will not hesitate to use deadly force to halt the character. The very fact that the character has bionics at all makes him suspect of having illegal bionics, in the minds of the police.

The Terran courts have been very supportive of law enforcement agents in such cases, citing their rights to protect themselves from a perceived threat. And until detection systems become more sophisticated, this is likely the way that things will remain.

BIONIC REPLACEMENTS

Most crippling injuries in the 24th century can be simply repaired by growing replacement tissue from the patient's own cells and then grafting it on. Entire limbs and organs can be repaired in this way.

But some sources (such as the black clinics) offer prosthetic replacements for those who prefer them to the real thing. Prosthetics, while they lack the subtlety of tactile sensation that real organs and limbs give, have many tempting advantages over their flesh-and-blood counterparts. Prosthetic limbs do not tire as easily as natural limbs, and they can often be made with compartments in which to hide small items. Prosthetic eyes can offer enhanced vision.

Prosthetics are not illegal in 2300, but many governments discourage their purchase, partly because of the security problems involved in having a population with enhanced strength and weapon-hiding places. But another reason that prosthetics are discouraged is that they can dehumanize their owners, as a result causing them to think of themselves as more machine than human.

Bionic Eyes

Very popular with the revolutionary crowd on Earth, most bionic eyes are fairly easy to detect because they tend to be of a standard shade of blue, brown, or gray. Most also have the lens-maker's logo neatly printed around the iris in tiny script. Some are shades that no human eye will ever be, but it is possible to obtain eyes which appear to be real. There are several option packages available for use with bionic eyes, each of which must be purchased at the time of installation. *Price:* Lv1500 for Excellent vision, Lv2300 for Exceptional vision.

Color Enhancement: This option allows the user to see things in computer-enhanced color, or black and white. Color enhancement makes it easier to spot camouflaged targets and to observe fine detail. *Price:* Lv500.

Low Light: This option allows infrared vision in low light environments, like bio-contacts. *Price:* Lv650.

Flash Proof: This option protects the owner's vision from sudden flares of light, giving him the same protection as photosensitive goggles. *Price:* Lv300.

Optic Imager: A favorite of espionage agents, this option lets a person take five high-resolution pictures on thought command and review them later. If the person has a neural jack, he may transfer the pictures to a high-resolution chip. To erase the pictures, the user simply records over them. *Price:* Lv1000.

Subtlety: This option makes it almost impossible to detect that the user's eyes are bionic. *Price:* Lv850.

Another reason that prosthetics are discouraged is that they can dehumanize their owners...

Bionic Ears

Though not as popular as bionic eyes, bionic ears enjoy a certain trendiness among some groups in the Core. One of the selling points of the low-frequency and high-frequency features is that they make the ear obviously artificial in shape and/or material. *Price:* Lv650 for Excellent hearing, Lv1100 for Exceptional hearing.

Low-Frequency Hearing: This option enables a person to hear sounds below the audiometric range of normal humans. Ears with this option do not appear normal—they tend to be larger than normal, and although constructed of cartilage and flesh, they are often of an unusual shape (pointed at the top, for instance). *Price:* Lv600.

High-Frequency Hearing: This option allows a person to hear sounds above the audiometric range of normal humans. Ears with this option also do not appear normal—they are usually of relatively dense materials such as plastics or even metals. *Price:* Lv600.

Sound Dampening: Although loud or irritating sounds won't damage the bionic ears in any



BIONICS AND THE MASSES

In general, the masses of Terra feel very threatened by the existence of bionic limbs and organs. To these people, cyberpunks belong to an irresponsible subculture of rebellion. Given the number of violent crimes perpetrated each year by bionically enhanced individuals, the general public would like to see all bionics, even neural jacks, outlawed.

way, they can be unpleasant to the user. This option enables the owner to dampen out specific ranges from the sonic spectrum, allowing sound to be dampened, which can also make it easier to hear a specific sound (such as someone's voice) in a noisy environment. *Price:* Lv650.

Recorder: This option allows the user to record one hour of sound and play it back at a later time. The recording can be accessed at any point and can be recorded over. The recorder option is especially popular with students and music fans. *Price:* Lv750.

Bionic Limbs

Like bionic eyes and ears, bionic limbs enjoy a certain fashion following, but their higher cost makes them economically out of reach for many. Bionic limbs come with a standard Strength of 12 but can be improved up to a maximum of 24. In most task rolls using Strength as a modifier, a character's normal Strength should be used, but if the referee judges that a particular task warrants it, the Strength of the bionic limb can be used instead. For example, if a character is attempting to lift a heavy weight from the floor, his natural Strength should be used, since all of his limbs and his torso muscles are involved. If, on the other hand, the character is hanging from a ledge by his bionic arm, the Strength of the arm should be used in determining whether or not he can hold on.

A one-handed firearm can be built into a bionic arm...

As there is some empty space in most bionic limbs, it is possible to have a secret compartment built into one. A bionic arm can have a compartment 20 centimeters long and three centimeters in diameter, and a bionic leg can have a compartment 30 centimeters long and eight centimeters in diameter. *Price:* Lv1600 for a Strength 12 bionic arm, plus Lv120 per extra point of Strength; Lv2000 for a Strength 15 bionic leg, plus Lv1 50 per extra point of Strength.

Equipment: Rather than having a secret compartment, a bionic limb may be constructed with any one-handed piece of equipment built into it. A one-handed firearm can be built into a bionic arm (although it is *highly* illegal), but is never built into a bionic leg, due to the fact that it would be nearly impossible to aim. The extra cost for such equipment is five times what the equipment would normally cost.

Cyberspace

CYBERSPACE DEFINITIONS

The following definitions will help to familiarize those new to cyberpunk with some common terms.

Cyberspace: This is the "world" perceived by deck jockeys when jacked into a computer net. Whether speaking of a local net, such as that within one city, or the entire net of phone lines and satellite links covering Terra, the term cyberspace is used.

The Net: This term is synonymous with "cyberspace," but emphasizes the links that create it.

Deck Jockey/Cyber Hacker/Cowboy: These terms can be combined in various ways, but all refer to those individuals who jack their minds into computer decks to enter cyberspace.

DOS Tower: The computer system of an individual building or company creates a distinct network that appears as a tower in cyberspace.

Deck: Cyber hackers use a special type of computer to access cyberspace: the deck. It is from this term that they have acquired the name "deck jockey."

Mainframe: A mainframe is the computer that integrates the system of a DOS tower. It can be thought of as the controlling unit of that system.

The Matrix: Because of the web of computer connections between businesses in it, cyberspace is sometimes called the "matrix."

You jack in and key the initiation sequence. Your vision fades to black, there is a stomach-tickling sensation of falling, and then you're speeding above the floor of the net, no more than a ripple in the ether.

All around you are golden lines of communication and power. They stretch into the distance on every side, running from DOS tower to faraway DOS tower, connecting system to system. The small company towers are dwarfed by the megalithic constructs of the military and megacorporate strongholds. As you speed past, unseen, the little towers glow with the neon light of unsecured information radiating from their files, but the biggest towers glitter blackly—their walls radiating not one bit of code, and reflecting all external energy. Looking beyond them all, toward the soft darkness of the infinitely distant horizon, you see the dim green of the net's gridlines, giving you your bearings.

Another ripple in cyberspace crosses just below you, heading for the Madsden Group DOS tower. Another deck jockey, going to try a raid. You lose sight of his ripple, but your senses continue along the line he was following, and suddenly you see a velvet blackness impact upon the tower's portal. The virus program spreads like a brushfire, dulling the tower's face, a cherry glow beginning in its center—for a second you believe he's going to make it through. Then the infected wall explodes silently, blasting away the contamination, and as you watch, the glittering blackness seals its wound. The DOS tower's secrets are still safe, and a cyber cowboy has died.

The referee who runs cyberpunk adventures in **2300 AD** will find himself saddled with a new task: describing action in the cybernet for cyber jockey player characters.

THE JOCKEYS

Cyber jockeys are the specialized computer hackers of the future. Not content to work through keyboard and video or Tri-D monitor, these people jack their minds directly into the computer net to run their programs. Some of them work as corporate or military experts, patrolling the system, on the lookout for raiders. Others work on the opposite side of the law, using dangerous programs in their attempts to breach the defenses of a DOS tower and run off with the contents of a file they can sell.

Regardless of their motivations, all are obsessed with the speed and power that they feel when running the net. And like other types of hot-rodders, they spend considerable time and money fine-tuning their equipment, their decks, for that extra edge they will need in a cyberspace dogfight.

When jacked into the net, cyber jockeys are so distanced from the outside world that it is as if they were deeply asleep. Only the flickering of their fingers across their keyboards betrays their wakeful state. A jacked cyber jockey is almost insensible to any stimuli not fed to him by the deck. Only strong stimuli, such as would be required to wake a very sound sleeper, will be noticed by a cyber jockey character while he is jacked in.

THE CYBER DECK

To make their runs in the net, cyber jockeys use a special type of computer called a cyber deck. A cyber deck can be treated like a non-player character having five stats: Speed, Accuracy, Offense, Defense, and Volume.

Speed: This is the response time of a deck, and it is added to the deck jockey's Coolness Under Fire to determine initiative in cyberspace combat. It is also a measure of the "distance" that the deck can travel in cyberspace each round. For each point of Speed, the deck can travel 10 "meters."

Accuracy: This indicates how smoothly a deck or other computer system runs. It is divided by 4 and used as a modifier to the cyber jockey's computer skill for tasks involving remaining undetected, detecting another system, and making attacks.

Offense: This is the strength of an attack by a deck or other computer system. It can be thought of as deck's DP value in combat. Offense also defines how much data a system can siphon

in one combat turn.

Defense: The ablative circuitry and shielding programs of the system make up its defense. The defense statistic can be thought of as the deck's armor.

Volume: This statistic indicates the number of "slots" that a system has to store data, house programs, and the like. It can be thought of as if it were the system's Encumbrance.

Beginning Deck Stats

The first thing to do in preparing to play a cyberspace adventure is to purchase a deck and fill out a record sheet for it. A beginning deck has a base value of 1 in Speed and Accuracy, 5 in Offense and Defense, and 50 in Volume. *Price:* Lv2500.

Improving Deck Stats

If a player wishes, a deck's stats can be raised in either of two ways. First, the character can tinker with the system, re-programming those stats he would like to have raised. To raise a stat in this way, the character must roll for the task in the sidebar.

The other way in which a deck's stats can be raised is by purchasing hardware to add to it. This specialized hardware should be very difficult to find (an adventure could be run to do so), and its availability and cost will be up to the referee, but as a guideline, expect each point to cost Lv100 times the level to which it will bring the statistic. Just as with character skill levels, each level of the statistic must be purchased before the next can be. For example, to raise a deck's Speed from 6 to 8, a character would have to spend Lv700 (to raise it to 7) plus Lv800 (to raise it to 8) for a total cost of Lv1500.

The communication lines can be treated somewhat like city streets. Glowing balls of light—information and other cyber jockeys—rush along them like pedestrians on a sidewalk.

THE NET

When running an adventure in cyberspace, the referee should describe the setting as in the narrative introduction above. The background against which everything rests is dark and infinitely deep, with faint gridlines hung against it for *reference*. Data towers stand at all distances and hang from all directions, some large and some small, some radiating unshielded data, and others locking it away within reflective black exteriors. The communication lines running from tower to tower are much the same: some of them are unshielded and radiate power; others lie glittering black. The character himself will usually appear to be a softly glowing ball of light. If he wants to project more personality than this, he can, even appearing as a humanoid figure with his own features, but in doing so he loses any anonymity he may have.

The communication lines can be treated somewhat like city streets. Glowing balls of light—information files and other cyber jockeys—rush along them like pedestrians on a sidewalk. Others flash by, sealed in protective programs.

If a character enters that street and follows it, he will find it intersecting with other lines at various places, leading in other directions. If he follows a line to its end, he will find himself at the portal to one or another DOS tower. Once past the security programs at the portal, the character will find corridors leading both vertically and horizontally in all directions. Along those corridors are files, arranged like offices within an office building. Many of those files will have subfiles within them, like the various cabinets in an office; and those may have yet further subfiles, like the drawers in a cabinet. (The referee will have to decide upon the Volume required for those files, given the capabilities of player characters in his campaign.) Protective programs will patrol many of the corridors, and important files and subfiles will have protective programs of their own.

The whole of the net, then, can be arranged like a dungeon crawl, with corridors to explore, treasures to discover, and monsters to avoid or destroy. But each of these things is merely an analog for something that has real existence in the world of the 24th century.

Task: To increase a cyber deck stat by tinkering: Routine. Computer. 20 minutes.

Referee: Before rolling for this task, the player must state which stat he is attempting to raise. A successful roll of this task will raise that stat by 1 point. To raise the same stat by a second point, the task must be rolled for at Difficult level; for a third point, it must be rolled for at Formidable level; and for a fourth point, it must be rolled for at Impossible level.

This process can be followed for each of a deck's stats. Volume is increased by 70 points each time the task is successfully completed, rather than 1 point.

Task: To evade: Difficult.
Computer and Accuracy.
Instant.

Task: To strike in
cyberspace combat: Routine.
Computer and Accuracy.
Instant.

Distance in Cyberspace

Since cyberspace effectively includes every computer net on or around *Terra*, the distances involved at first seem immense. But given the speed at which electricity travels, the distances are really very little. When running adventures in cyberspace, it is suggested that the referee simply describe the process of travel to the character involved, without worrying overly about actual distance travelled.

Only when combat is involved does distance become important. When combat commences, or is about to commence, the referee should describe distances in "meters," approximating the distances as if the surroundings were actually streets and buildings. Once combat is over, exact indications of "meters" can be abandoned once again.

Also, only when combat is imminent does it become important just how quickly a deck can siphon information from a file. The rest of the time, it can be assumed that the file is simply picked up, as long as there is sufficient Volume in the deck to store it.

Stealth in Cyberspace

There will be times when a character in cyberspace will not want to be noticed or when he will want to notice other characters or systems that may be hidden from him. It may be that the character is prowling around a DOS tower, intending to break in, and wants to look for defense systems. Or it may be that the character is patrolling such a tower, watching for thieves.

If a character is trying to keep from being noticed, the referee should subtract his Computer skill and his deck's Accuracy modifier from task rolls made to notice his presence. In a like manner, that character can make a task roll to notice a hidden system, applying his Computer skill and Accuracy modifier to it as well.

RUNNING CYBERSPACE COMBAT

Once cyberspace combat is joined, it is run much like any other combat in **2300 AD**. Each turn represents 10 seconds of time, rather than 30, however, so one turn of regular combat outside the net corresponds to three turns of cyberspace combat within the net.

Each net combat turn has 10 initiative points. A character's initiative is equal to his Coolness Under Fire plus his deck's Speed statistic. A character normally acts twice in a turn: once at his initiative point, and once at half his initiative point, just as in regular combat. However, if the total of Coolness Under Fire and Speed is greater than 10, consider the character to be able to act as if he had an Initiative of 10 (he acts once at Initiative point 10 and again at Initiative point 5) and also an Initiative equal to his actual Initiative minus 10. For example, if a character has a Coolness Under Fire of 6 and a deck with a Speed of 8, that character would have an Initiative of 14. He could therefore act at Initiative points 10 and 5 (as if he had an Initiative of 10) as well as Initiative points 4 and 2 (as if he had an Initiative of $14 - 10 = 4$). In some cases (such as an Initiative of 20), a character may find himself with two actions at the same Initiative point. In these cases, he must simply hold one of the actions back until the next Initiative point—no character can perform two actions at the same time.

At each of his initiative points, the character may perform one of the following actions:

- Move.
- Attack.
- Initiate a program stored in Volume.
- Jack out.
- Special action.

Move: To move, the character simply travels a distance equal to 10 meters times the speed of his deck. If a character is currently within melee range of a hostile system, he cannot move away unless he evades by rolling successfully for the task in the sidebar. If the evade roll is successful, the character can even move through the space occupied by the other system.

Attack: Attacks in cyberspace are performed somewhat like melee strike attacks in normal combat. Antagonists must be in melee range (two meters), and the task in the sidebar must be rolled for. If the attack is successful, the defender must mark off one point of Defense for every point of Offense his opponent was using. If there are no Defense points left, the attacker may indicate what statistic he is now attacking, and the defender must begin marking points off that statistic.

If Volume is attacked, damage is taken beginning with any empty Volume and then destroying Volume containing programs, working from the bottom of the program list up. When any amount of a program is lost, the program becomes nonfunctional, although any other spaces it takes up will still absorb damage.

The damage caused by attacks is permanent until repaired. Repairs are made in the same way that statistics are normally improved (see above). Once all statistics of a deck are reduced to zero by attacks, the cyber jockey himself can be attacked. Each Attack point directed against him is equivalent to one Shock point from normal combat. When the shock points taken equal the cyber jockey's consciousness level, the character becomes unconscious; when they equal his life level, he is dead.

Initiate a Program Stored in Volume: As an action, a character can state that he is activating any program contained in his system's Volume. Some programs have special rules that apply to them (see below).

Jack Out: If the character desires, he can attempt to jack out of cyberspace, abandoning his deck and programs to the enemy, but saving his life. To jack out, the character's deck must have at least one point left in any statistic, and the character must roll for the task in the sidebar.

Special Action: If the referee agrees, a character may perform an action not mentioned here.

Special Programs

A number of programs may become available to a cyber jockey, when and if the referee allows. Some examples are listed here; others can be created as the referee desires.

Fast Forward: This program lets a system take all of its actions for one combat turn at the beginning of the turn. If the system has two actions, this program will cause them to occur at Initiative points 10 and 9; if the system has four actions, they will occur at points 10, 9, 8, and 7. This is a one-shot program and takes up 5 volume points. *Price:* Lv75.

Leaper: When this program is triggered, the next attack that its system makes will bypass the defender's Defense statistic and attack a statistic of the attacker's choice. This is a one-shot program with a volume of 8. *Price:* Lv250.

Jump: This program is similar in use to Leaper. It allows any attack into Volume to jump ahead by 10 Volume points when doing damage. Jump has five charges and a volume of 6. *Price:* Lv150.

Wrench: Wrench will rebuild the missing portion of any damaged program, as long as at least one volume point of the program remains. For this program to succeed, the task roll in the sidebar must be made. Wrench has four charges and a volume of 8. *Price:* Lv350.

Grapple: This program makes it difficult to escape from a hostile system. It is the real threat offered by mainframe systems. If the mainframe is lucky with Grapple, it can pound the cyber jockey's system, and the cyber jockey, to death. When Grapple is used, it increases any task rolls to evade or jack out by one level. Grapple is a permanent program with a Volume of 9. *Price:* Lv2000.

Bondage: A tougher version of Grapple, Bondage increases the difficulty of evade and jack-out rolls by two levels. *Price:* Lv5000.

Second String: This is not actually a software program, but a piece of hardware with 30 points of off-line Volume that can be switched during a run for any solid block of 30 points active Volume. Once switched, the system cannot be re-switched until the run is over (although multiple Second Strings can be used one after another), and there is a one-turn delay between the triggering and the switching, during which no program in either block can be used. Second String can be used to effectively increase volume available for siphoning programs. *Price:* Lv1500.

Phalanx: This is an almost mythical military program. Like *Leaper*, it allows the system's next attack to bypass the defender's Defense and attack a statistic of the attacker's choice, but it will even attack a program of the attacker's choice in the defender's Volume. Any system that has a copy of this program either belongs to a national intelligence agency or is wanted by one. Phalanx can be used an unlimited number of times and has a volume of 15. *Price:* Unavailable.

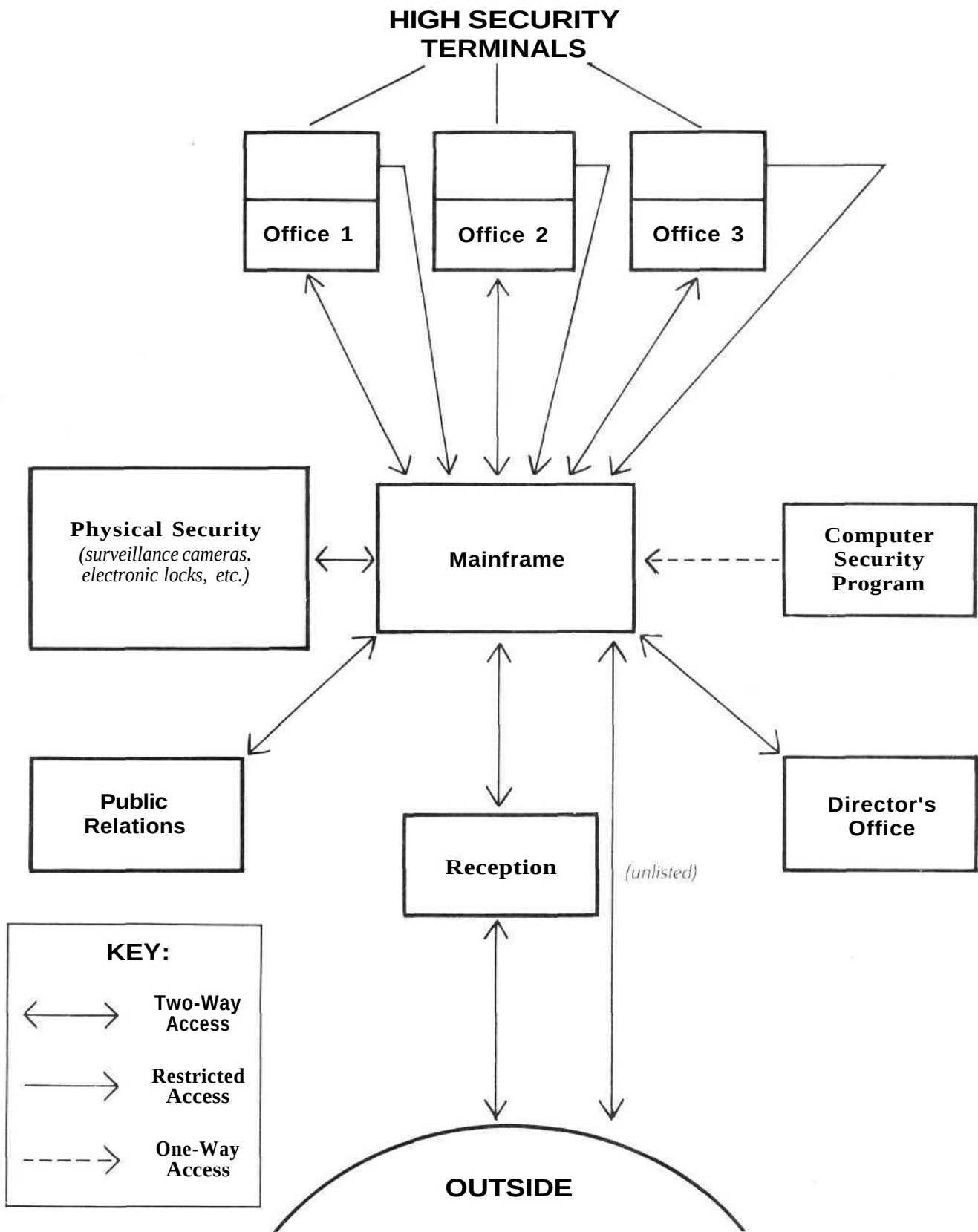
Blank Mind: Blank Mind is purportedly only a fiction, but there are those who swear that it exists in the defense systems of a few military nets. Its effect is rumored to be as follows: Once the Defense of a cyber jockey's deck has been overcome (or bypassed), this program can attack directly into the cyber jockey's mind. It is rumored to be a one-shot program with a volume of 30. *Price:* Unavailable.

Task: To rebuild a program with Wrench: Routine. Computer and Accuracy. 10 seconds.

Referee: If at least 75 percent of the program remains, the task level is Routine; if at least 50 percent, it is Difficult; if at least 25 percent, it is Formidable; and if less than 25 percent remains, the task level is Impossible.

Task: To jack out: Routine. Computer. Instant.

SAMPLE COMPUTER LAYOUT



Cameras

Entrance

Main Corridor

Main Lab

Locks

Entrance

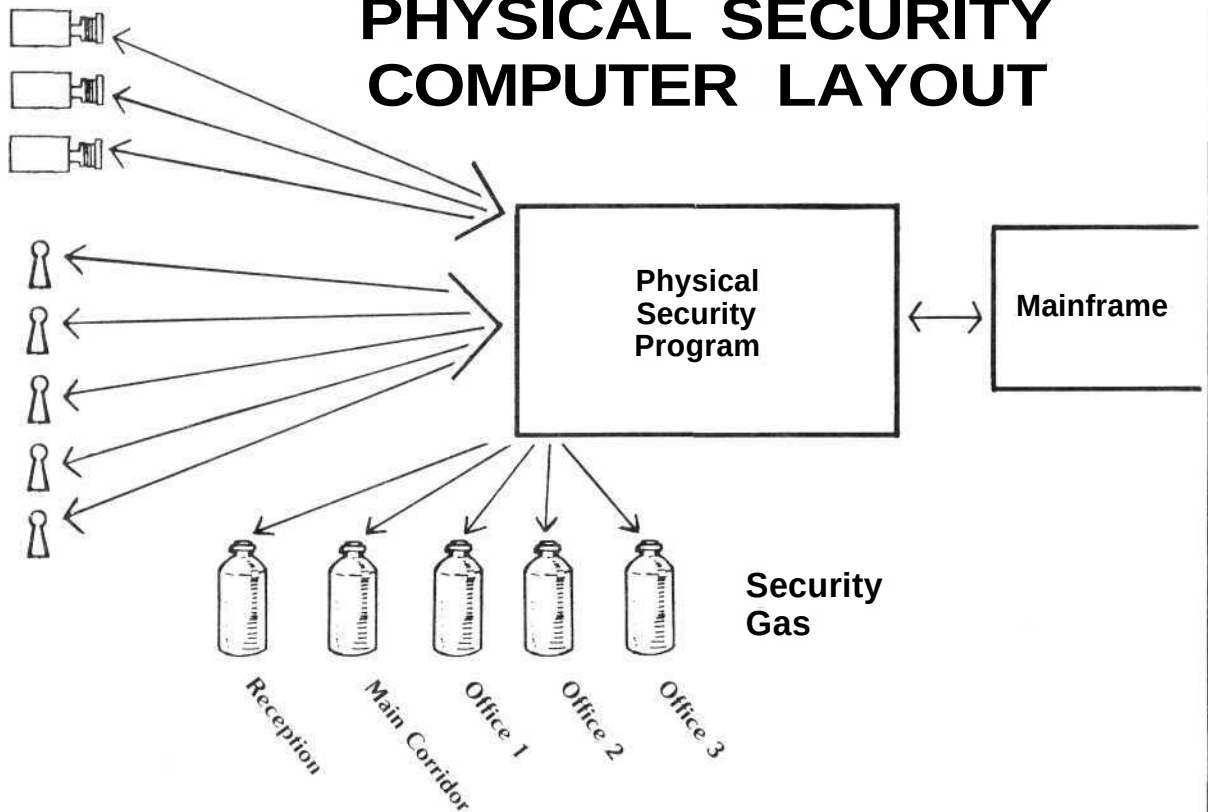
Reception

Office 1

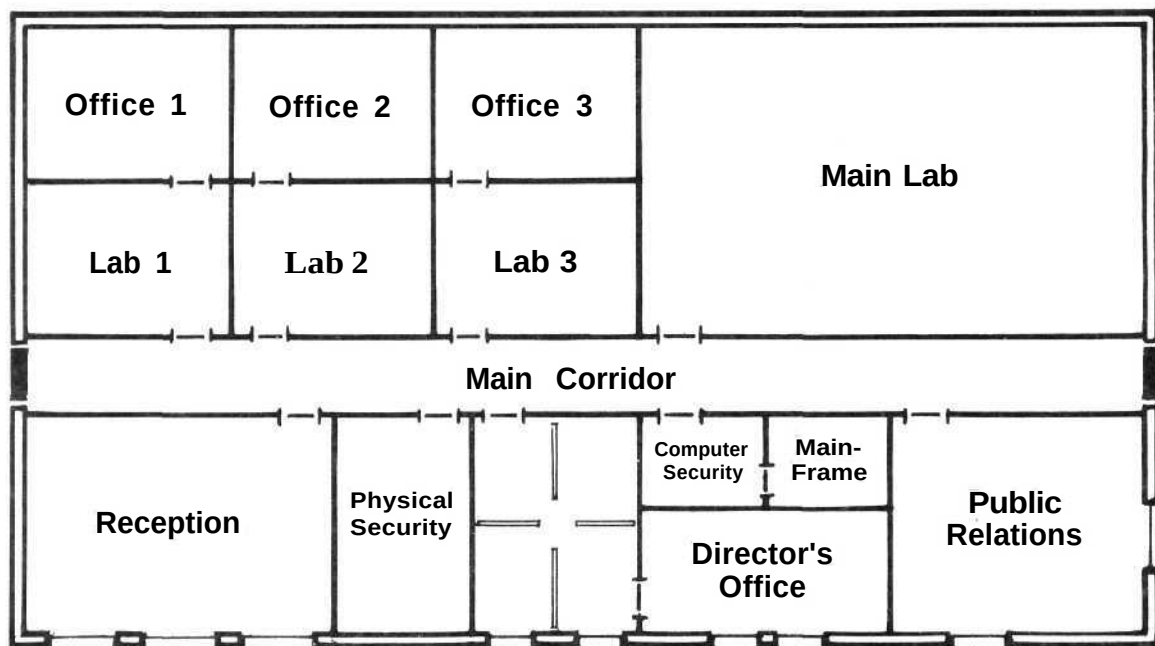
Office 2

Office 3

PHYSICAL SECURITY COMPUTER LAYOUT



BUILDING LAYOUT



Worm in the Big Apple

WARNING

The Provolutionists have very little concern for individual human life. As a consequence, some of the concepts in this adventure are a little gruesome. The referee should present these in a matter-of-fact manner, without going into graphic detail. The intent is to provide the players with a strong motivation for action and a deep sense of satisfaction when they best the villains, not to glorify senseless violence.

In this role-playing competition, up to eight players can take the roles of a pregenerated set of characters in a battle against a small group of Provolutionists who have brought their terrorism to New York City, threatening the lives of the Big Apple's two million inhabitants.

INTRODUCTION

In this chapter, the referee will find three different items. The first is the text of the adventure itself, involving Provolutionist terrorism in New York City in the year 2301. Next, there is a page of three maps to be used with the adventure. Finally, there are eight character descriptions, each of which has the vital statistics listed for a particular player character to be used in this adventure.

Adventure Text: In order to *prepare* to run this event, the referee will need to read carefully through the adventure text. Although the most important tasks have been located in the sidebars, many have been left to the referee to decide. It is recommended that after reading the adventure, the referee take a few minutes to imagine what other task statements might be needed and write down those that he feels are most likely to occur. Also, if the players are not using one of the player characters suggested in the scenario, the *referee* may want to beef up the Provolutionists, maybe giving them some more cyberpunk equipment.

Maps: A page of three maps is included with this adventure. The first is of the ground floor of the current Provolutionist hideout, a centuries-old tuberculosis sanatorium that has been turned into a museum of ancient medical tools. The second map is of the basement level of this building. The third is of the upper floor of the building. Please note that the grounds of the museum slope downward toward the north, so that the basement level is actually ground level in the back, and from that side, the first level can only be reached by stairs.

Also, note that few locks or electronic security systems are defined for the facility. Most are left up the *referee* to set, determined by the adventure party's success to that point. Specific contents of most of the rooms are left to the *referee* to decide as well.

Player Characters: The eight character descriptions included with this adventure are each numbered. They should be assigned to players in numerical order from one to eight. In this way, the characters most essential to the adventure will be used even if the player group consists of less than eight players. For example, if there are seven players in the group, character sheets one through seven would be used, and number eight would not be used.

It is possible to substitute other player characters for the ones included for this adventure, but attention should be paid to the skills that are represented so that skills necessary to complete the adventure are present in the party.

Each of the preprepared characters has all characteristics and skill levels listed for that character. The referee should copy these onto character sheets, leaving name, sex, and equipment blank. Just after the sheets are passed out to the players, a few minutes (perhaps 10) should be spent to allow them to decide upon a name and gender and to purchase equipment. Explain to the players that the adventure takes place totally within New York City. Because of this, most of the characters will only be allowed to have with them such things as they could logically carry through Earth's Orbital Quarantine Command in two suitcases. Small Pentapod products are allowed, as are hand-held computers and the like, but firearms are right out (even bionically concealed ones would be noticed under the intensive probing of OQC), as are explosives, axes, clubs, knives, bayonets, and other weapons. (However, if characters other than those listed here are included in the adventure, then it is very possible that there may be some hidden weapons in the group. And legal, nonweapon bionics will be passed through OQC with little problem.)

The two Law Enforcement characters and the Canadian Field Agent can carry pistols, and the Law Enforcement characters can have heavier weapons available at their apartments, within reason (this means anything short of automatic rifles or high explosives). They may also have private vehicles, if they desire to pay for them.

After the introduction to the adventure has been described or read to the players, their characters

can attempt to get other equipment from local shops or the police precinct headquarters (where stun guns and non-rigid armor may be given to non-police characters, and police may be given shotguns at most), but this is subject to the referee's approval. The characters should *not* be allowed to walk down city streets with rifles, hand grenades, and the like out in plain view. This is New York City, not a Frontier world.

REFEREE'S SYNOPSIS

In this adventure, the PCs begin on a bus from the municipal airport. Many of them do not know one another, but they are thrown together in a desperate attempt to halt a sinister plot when their bus strikes a man and it is discovered that he has an atomic bomb where his intestines used to be. The PCs learn that this is the work of Provolution, and they set out to stop them. Eventually they discover that the Provolutionist group is holed up in a museum it has taken over. The PCs assault the museum and battle their way past genetically enhanced baboon guards to capture or kill the Provolution agents, preventing them from setting off a major atomic explosion in the heart of the city.

THE ADVENTURE

The player characters all happen to be on the same bus, riding from the municipal airport into downtown New York. PC No. 1 is a Canadian Federal Agent who has come to New York to take possession of a criminal being extradited from America to Canada. Two New York City policemen, PCs No. 2 and No. 3, have met him at the airport and are taking him to precinct headquarters. PCs No. 4 and No. 5 are members of their homeworlds' respective space militaries. They are each on leave and have come to New York to visit relatives; at the airport, they met in an international service members' club and struck up a conversation, continuing it on the bus. PC No. 6 grew up as the child of members of the original exploratory team on Rho Eridani and began training in exploration, only to abandon it for a love of journalism. This PC is now in New York, looking for contacts to sell documentaries to. PC No. 7 has returned to Earth to receive an inheritance. And PC No. 8 is here to make trade contacts. Except where noted above, none of the PCs know each other.

Suddenly, everyone is thrown forward as the driver shouts and slams on the brakes. The bus has stopped, and people on the sidewalks are staring with horrified expressions. Someone screams. A pedestrian runs for a nearby telecom stand and begins to place a call.

Suddenly, everyone is thrown forward as the driver shouts and slams on the brakes.

A man has walked out in front of the bus, and it has run over him.

If the PCs leave the bus, they will see the victim lying just behind the bus's right front tire. He is bleeding profusely from a ruptured abdomen. PCs with medical skills will be able to determine that he is still alive, but his intestines are *missing* (see the diagnosis task in the sidebar).

In the abdominal cavity, there is, instead of intestines, a metal sphere about six inches in diameter, with strange projections and wires on its outside. PCs with the Demolitions skill may recognize the object as a miniature atomic bomb (see the task to identify the bomb, in the sidebar), and they will realize that as small as it is, it must not have any shielding over the radioactive core, so anyone who remains close to the victim will be receiving dangerous levels of radiation.

Of course, as far as the players know, the bomb might go off at any time. The demolitions experts in the group might want to disarm it immediately, regardless of radiation danger to themselves. The task roll made to identify the bomb will reveal that this is a very straightforward device, and with the removal of two prominent wires, its timing mechanism can be disarmed (see the task in the sidebar). This can even be accomplished by standing at a distance and using a stick to tear the wires loose. If nothing else is at hand, there are a number of small trees planted in spaces in the sidewalk, and a branch from one of these could be torn loose. The jostling of disarming the bomb will roll it out of the victim's abdominal cavity and onto the street.

Task: To diagnose the victim: Routine. 5 seconds.

Task: To identify the bomb: Simple. Demolitions. Instant.

Task: To disarm the bomb: Routine. Demolitions. 5 seconds.

Task: To search police records: Difficult. Information Gathering, Computer, and Bureaucracy. 30 minutes.

To Saint Amelia's

Emergency vehicles arrive at about this time and, after debate about how to handle the situation, an ambulance team loads the victim up and a fire vehicle cordons off the area where the bomb is lying, guarding it until a properly prepared team can come and get it. The victim is to be taken to the Emergency Room of St. Amelia's Community Hospital, a nearby facility. The ambulance team makes it clear to the Law Enforcement PCs that everyone on the bus and several of the nearby pedestrians should come to the hospital to be tested for radiation damage. If the Law Enforcement PCs desire, they can call their precinct headquarters first. Headquarters will order them to the hospital, where they will be contacted later.

At the hospital, it will be determined that none of the PCs have received extensive radiation burns. Also, the fellow who had the bomb in his belly has a chance to live, despite the fact that not only were his intestines missing, but even those organs he retained were badly burned by radiation. If doctors can keep him alive on intravenous fluids long enough to force-grow new organs for him, he may recover.

Another discovery that arose during preparation for surgery was that a microelectronic circuitry board had been inserted just under his skull. Initial analysis suggests that it was stimulating him to walk, and although his point of origin and his destination are unknown, it is estimated that he could not have walked more than a dozen blocks before stepping in front of the bus, and it is very possible that he was headed for the City Hall complex just across the street from where he was struck. That is all that can be determined until (and if) he recovers enough to talk in weeks to come.

The ambulance team makes it clear to the Law Enforcement PCs that everyone on the bus and several of the nearby pedestrians should come to the hospital to be tested for radiation damage.

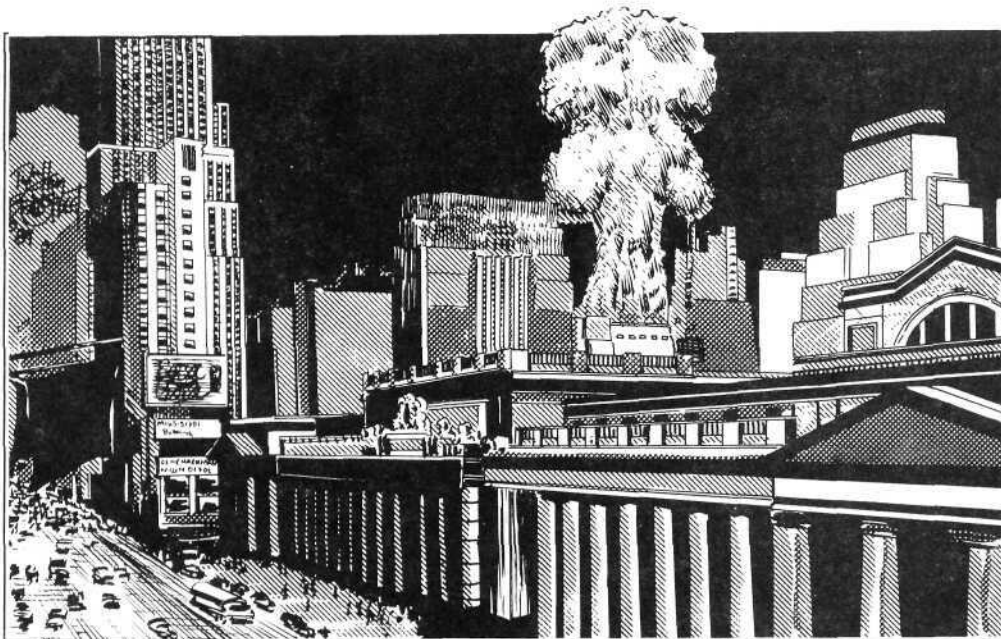
When the Law Enforcement PCs contact their headquarters again, they will be told that this plot looks like the work of Provolution. The man with the bomb in his belly has been identified as a local journalist who has been on the missing persons list for the past two days. The Law Enforcement PCs are assigned to track the Provo band down and stop them. Considering the seriousness of the situation, the other PCs are offered a chance to help in the mission. As mentioned above, the PCs can either purchase equipment they need locally, or they can go to the precinct headquarters to ask for some. Either way, the referee should impress upon them the importance of finding the Provolutionists quickly.

(One piece of equipment that the characters should definitely have is a radiation sensor. If they do not think to seek one, have the police give them one if they go to precinct headquarters for equipment, or have one sitting in plain sight in the shop where they buy their equipment.)

Looking for Leads

Once the group has its equipment, the next question is: Where should they begin looking for leads as to the Provolutionist headquarters? The referee should allow the group to develop any plan they wish and use his creativity in dealing with that plan. (In other words, if they decide to wander off someplace you had not prepared for, play it by ear.) However, it is most likely that the group will try one of two approaches: Either (A) they will ask police officials for more information, or (B) they will patrol the area in which the original walking bomb was found.

(A) If they ask police officials for more information, they will be invited to search police records (see the task in the sidebar). Every PC in the group can be performing this search at the same time, in which case the lowest time rolled is the amount of time spent. (It is assumed that once one PC finds the clues below, the others will stop searching.) Also, the referee should roll 1 D6 + 2, and if the PCs have not found the clue in that number of hours, they will hear a distant



explosion and will be informed that the City Hall Complex has exploded.

When the PCs succeed at this task, they will discover that among the most recent reports of missing persons are two security guards who work nights at a nearby historical site—a centuries-old tuberculosis sanatorium turned medical museum. Both guards have been missing for the past two days. Also, there is a vending machine route person missing, and his route includes the canteen at the museum. The director of the museum is not on the list, but calls to his home will be unanswered, and any call to the museum will be answered by a recorded message stating that the facility is closed.

This should be enough to get the group heading for the museum.

(B) If they patrol the area in which their bus struck the man, after 1 D6 hours their radiation sensor will begin to detect another moving point of radiation. To locate it, they will have to triangulate by running to several different locations and taking readings. Each time they take a new reading (after the first), have them make a task roll (as listed in the sidebar).

If the PCs do not succeed within 10 attempts, the bomb reaches its target (the City Hall complex) and goes off, destroying the Complex and several blocks of buildings around it. It should be assumed that the PCs are far enough from the Complex at the time that they are sheltered from the worst of the blast by intervening buildings. Where they are standing, the blast has attenuated to a concussion 2, and fragmentation is blocked completely.

(If instead of patrolling the area, the PCs simply wait at the City Hall Complex, the task above should be made Routine, but if they fail it six times, the bomb gets inside the complex and goes off, and the PCs are killed in the blast.)

When the PCs finally succeed at the task to pinpoint the bomb, they will see their target, a human male, 200 meters away on the other side of the street, walking dazedly down the sidewalk. Now they will have to neutralize the bomb, preferably while saving the life of the man carrying it. As with the victim before, the bomb is inside the man's abdomen.

At this point, surgical tools would be handy. Note that in order to get to the bomb quickly, the PCs will probably have to operate on the man right on the sidewalk (see the task listed in the sidebar). This is likely to cause a stir among passers-by.

Once they have succeeded in stopping the man and disarming the bomb, they may be able to use the results of their triangulation to trace the man's path back to his point of origin. To do this, they will need to have a local map, and they will have to succeed at the task listed in the sidebar.

If the group fails at this task, they will have to come up with another plan to find the Provolution hideout.

Task: To pinpoint the point of radiation: *Difficult. Electronics. 20 seconds.*

Referee: Failure at this task will never result in a mishap. Failure simply means that an accurate triangulation was impossible on the present attempt because the point of radiation is moving, sometimes even through buildings.

Task: To surgically remove the bomb (Hazardous): *Difficult. Medical or First Aid. 1 minute.*

Referee: Success at this task means that the patient lives and the bomb is ready to be disarmed (see the task to disarm, above). Any mishap short of Total means that the patient dies but the bomb is ready to be disarmed. Total mishap means that the bomb goes off, destroying everything within a radius of about six blocks (being outside of any building, there is less material to contain the blast).

Task: To determine the man's point of origin: *Simple. Computer. 30 seconds.*

Referee: If no computer is available to the character performing the task, one-half of the Education modifier can be used instead of Computer skill, but increase the difficulty of the task by two levels. Also, increase the task difficulty by one level for every two unsuccessful attempts the group made at pinpointing the man in the first place. This represents the fact that the earlier the PCs pinpointed him, the closer he was to his point of origin.

Task: To pick the lock: Routine. Security Systems or one-half Mechanical. 3 seconds.

Task: To bypass the security system: Difficult. Security Systems or one-half Electronic. 5 seconds.



Assaulting the Museum

Once the PCs have determined that the Provolutionists are likely to be at the museum, they must travel there. This could be a little tricky if they are planning on taking lots of shotguns, body armor, and the like. It is left to the referee to decide how travel to the museum should be handled.

Also, one thing the referee should keep in mind is that if the Provolutionists discover that the PCs are at the museum, they will try to escape the area (see "If Provolution Runs," below).

Looking at the map, the referee will note that the museum consists of a ground floor with wings, a second floor to the main portion of the building, and a basement level to that portion as well. All of this is set in the middle of a large area of ground. A road circles the property, and groups and lines of trees are located in several places.

The entire compound is surrounded by a three-meter-tall wrought-iron fence. The gate is locked with a mechanical lock, and there is an electronic security system on the gate as well. To defeat these two items, the characters will have to roll for the tasks in the sidebar.

Once the PCs are on the grounds, there is a chance that they will be discovered by a roving security band. The referee should use a watch to keep track of real time that passes between the moment the PCs enter the grounds and the moment they enter the building. Once every minute roll 1D10; on a 3 or less, they are attacked by the security band. This is a group of six genetically enhanced baboons carrying hatchets, clubs, and machetes. Treat them as Experienced Ground Military NPCs with double the combat movement allowance of humans and a melee DPV of 0.3 bare-handed. If any shots are fired or any of the baboons escape into the museum, the Provolutionists inside will be alerted.

Once inside the building, the PCs will discover that the museum is laid out as much as possible to resemble the way it was used as a sanatorium. The private rooms have beds and dressers in them, with the addition of hanging display cases full of small medical items on the walls; the activity rooms have tables and chairs set out, but there are exhibits on the tables; the storage rooms have medicine carts, but they only hold file cards describing medicines typically used; the offices have desks and chairs, and there are histories of the development of medicine described on plaques hanging on the walls. In each of these rooms, the PCs have a 1-in-6 chance of encountering 1 D6 genetically enhanced baboons armed as before.

In the living quarters upstairs, the PCs will find four Provolutionists having a meal. Three of them are Green Field Agent NPCs with Arno Five-Fifteen handguns; the fourth is an Experienced Ground Military NPC with a Traylor Model 10 Riot Gun, and a wrist blade in each arm.

The Climax

In the basement, the PCs will find two Provolutionists behind a table in the kitchen area, working at inserting another atomic bomb into another innocent victim. When the PCs enter, the Provolutionists will realize that escape is hopeless—they will take cover behind the table (which has cabinets beneath it to provide cover), and one of them will attempt to hold the PCs off with area fire from a Wu-Beijing Type-49 Assault Rifle while the other tries to set off the bomb. These Provolutionists are Green Academic NPCs, but the one with the assault rifle has a neural jack with a chipped Combat Rifleman Skill of 2. On any combat phase in which the other NPC is not struck by fire or melee attacks, roll 1D10—on a roll of 1, he sets the bomb off, destroying the building and its neighborhood.

If Provolution Runs: If, at any time, the Provolutionists in the basement hear gunfire in or around the museum building, they will try to escape in a range truck they have hidden in the garage behind the building. Note again that there is an exit from the kitchen directly onto the grounds behind the museum, and the door to the garage is only about 20 meters away. (There is also a set of fire stairs from the upper floor for the Provolutionists there, if they have not already been dealt with.) But first, they will set a timer on a bomb they have assembled in the furnace room. This bomb consists of their entire stock of uranium and would destroy an area approximately one kilometer in radius around the museum.

When the PCs find the bomb, there will be 19 minutes left on the timer. To disarm the bomb, they will have to roll for the task in the sidebar.

The Resolution

After stopping the Provolutionists, the PCs will find more missing persons, including the museum's director, locked in the basement storage room, behind the workshop room. When they contact police headquarters again, they will be rewarded as heroes, and any wounds they took in their adventure will be treated free of charge. They will also be treated as guests of the city for several weeks, being invited to speak on public videocasts.

JUDGING A WINNER

Since this adventure has been designed as a role-playing competition, the PCs included in it have widely varying talents. Therefore it would not be fair to judge them on the basis of their performance on tasks. Instead, it is suggested that the referee keep track of exceptionally good instances of role playing throughout the adventure and use it to decide a winner. Some good questions to consider in doing this are: Who came up with the most and best ideas? Who really acted the part of the character assigned to them? Who threw themselves into stopping the Provolutionist plan and saving the lives of their victims? Use these things to guide you in making your decision.

Task: To disarm the bomb (Hazardous): Difficult. Demolitions. 1 minute.

Referee: If more than one PC works on this task, the extra ones add one-half their demolition skill to the task, but only the primary PC makes the roll. A Total Mishap means the bomb explodes. Any other mishap means a tool breaks, a PC scratches a hand, or some similar occurrence.

CHARACTER STATISTICS

The following eight player characters are designed for use in this adventure.

PC No. 1

This PC is a Canadian Federal Agent who has come to New York to take possession of a criminal being extradited from America to Canada.

Nationality: Canada *Homeworld:* Earth *Gravity:* Normal *Frontier/Core?:* Core
Gender: _____ (Good-looking) *Birthdate:* 2260 (age 40) *Mass:* 72 *Eyesight:* Average *Hearing:* Average *Body Type:* Ectomorph *Throw Range:* 96 *Coolness Under Fire:* 6 *Encumbrance:* 52 *Native Language:* English *Other Languages:* French.

First Career: Ground Military (3 years) *Second Career:* Field Agent (18 years).

Attributes: *Size:* 14 *Strength:* 12 (Normal-G) *Dexterity:* 1 4 (Normal-G) *Endurance:* 9 *Determination:* 10 *Intelligence:* 14 *Eloquence:* 13 *Education:* 15 *Consciousness:* 3 *Life:* 7.

Skills: Demolitions-4, Security Systems-4, Ground Vehicle-3, Melee-3, Stealth-3, Bureaucracy-2, Combat Rifleman-2, Sea Vehicle-2, Sidearm-2, Survival-2, Computer-1, Heavy Weapons-1, Information Gathering-1, Streetwise-1, Forgery-0.

Money and Equipment: Lv21,000.

PC No. 2

This PC is the first of two New York City police officers who were assigned to meet PC No. 1 at the airport.

Nationality: American *Homeworld:* Earth *Gravity:* Normal *Frontier/Core?:* Core
Gender: _____ (Plain-looking) *Birthdate:* 2266 (age 34) *Mass:* 109 *Eyesight:* Average *Hearing:* Average *Body Type:* Mesomorph *Throw Range:* 96 *Coolness Under Fire:* 5 *Encumbrance:* 40 *Native Language:* English *Other Languages:* French.

First Career: Law Enforcement (16 years) *Second Career:* None.

Attributes: *Size:* 8 *Strength:* 12 (Normal-G) *Dexterity:* 1 1 (Normal-G) *Endurance:* 1 4 *Determination:* 9 *Intelligence:* 14 *Eloquence:* 7 *Education:* 12 *Consciousness:* 5 *Life:* 10.

Skills: Sidearm-4, Melee-3, Stealth-3, Ground Vehicle-2, Information Gathering-2, Streetwise-2, Bureaucracy-1, Psychology-1, Computer-0.

Money and Equipment: Lv16,000.

PC No. 3

This is the second of two New York City Police sent to meet PC No. 1 at the airport.

Nationality: American *Homeworld:* Earth *Gravity:* Normal *Frontier/Core?:* Core
Gender: _____ (Good-looking) *Birthdate:* 2269 (age 31) *Mass:* 69 *Eyesight:* Exceptional *Hearing:* Excellent *Body Type:* Ectomorph *Throw Range:* 88 *Coolness Under Fire:* 4 *Encumbrance:* 48 *Native Language:* English *Other Languages:* French.

First Career: Core (11 years) *Second Career:* Law Enforcement (1 year).

Attributes: *Size:* 13 *Strength:* 1 1 (Normal) *Dexterity:* 1 1 (Normal) *Endurance:* 13 *Determination:* 1 0 *Intelligence:* 1 0 *Eloquence:* 1 6 *Education:* 1 4 *Consciousness:* 3 *Life:* 6.

Skills: Computer-5, Electronic-4, Bureaucracy-2, Ground Vehicle-2, Information Gathering-2, Melee-2, Sidearm-1, First Aid-0, Psychology-0, Stealth-0, Streetwise-0.

Money and Equipment: Lv12,000.

PC No. 4

This PC is a member of an international space military force that polices Sol's asteroid belt and has come to New York on leave to visit relatives. PC No. 4 met PC No. 5 at the airport service members' club.

Nationality: Greek *Homeworld:* Asteroids *Gravity:* Zero-G *Frontier/Core?:* Core
Gender: _____ (Good-looking) *Birthdate:* 2273 (age 27) *Mass:* 75 *Eyesight:* Poor *Hearing:* Average *Body Type:* Ectomorph *Throw Range:* 104 *Coolness Under Fire:* 3 *Encumbrance:* 56 *Native Language:* Greek *Other Languages:* English.

First Career: Ship Crew (1 year) *Second Career:* Space Military (7 years).

Attributes: *Size:* 1 5 *Strength:* 13 (Zero-G) *Dexterity:* 1 7 (Zero-G) *Endurance:* 1 6 *Determination:* 9 *Intelligence:* 13 *Eloquence:* 14 *Education:* 8 *Consciousness:* 3 *Life:* 7.



Skills: Demolitions-4, Computer-2, Melee-2, P-suit-2, Bureaucracy-1, Pilot-1, Combat Rifleman-0. *Electronic-0, Mechanical-0, Ship Drive Engineering-0, Sidearm-0, Survival-0.*
Money and Equipment: Lv9000.

PC No. 5

PC No. 5 was born at the Manchurian outpost at DM + 1 4774 and serves in the Manchurian Space Military. This PC has struck up an acquaintance with PC No. 4.

Nationality: Manchuria *Homeworld:* DM + 1 4774 *Gravity:* Zero-G *Frontier/Core?:* Frontier
Gender: _____ (Good-looking) *Birthdate:* 2280 (age 20) *Mass:* 75 *Eyesight:* Average *Hearing:* Average *Body Type:* Ectomorph *Throw Range:* 120 *Coolness Under Fire:* 4 *Encumbrance:* 56 *Native Language:* Manchurian *Other Languages:* English.

First Career: Space Military (2 years) *Second Career:* None.

Attributes: *Size:* 15 *Strength:* 13 (Zero-G) *Dexterity:* 15 (Zero-G) *Endurance:* 10 *Determination:* 12 *Intelligence:* 11 *Eloquence:* 12 *Education:* 12 *Consciousness:* 3 *Life:* 7.

Skills: P-suit-3, Electronic-2, Mechanical-2, Combat Rifleman-0, First Aid-0, Melee-0, Sidearm-0.

Money and Equipment: Lv2000.

PC No. 6

This PC is in New York looking for contacts to sell documentaries to.

Nationality: Texan *Homeworld:* Rho Eridani *Gravity:* Low-G *Frontier/Core?:* Frontier
Gender: _____ (Unattractive) *Birthdate:* 2253 (age 47) *Mass:* 71 *Eyesight:* Average *Hearing:* Average *Body Type:* Normal *Throw Range:* 56 *Coolness Under Fire:* 1 *Encumbrance:* 28 *Native Language:* Spanish *Other Languages:* English, French, German, Manchurian.

First Career: Contact (15 years) *Second Career:* Journalist (13 years).

Attributes: *Size:* 7 *Strength:* 1 (Low-G) *Dexterity:* 14 (Low-G) *Endurance:* 12 *Determination:* 10 *Intelligence:* 12 *Eloquence:* 11 *Education:* 13 *Consciousness:* 3 *Life:* 7.

Skills: Biology-4, Information Gathering-4, Linguistics-3, Medical-3, Survival-3, Writing-3, Hover Vehicle-2, Imaging-2, Interviewing-2, P-suit-2, Psychology-1, Anthropology-0, Bureaucracy-0, Computer-0, Sidearm-0, Streetwise-0.

Money and Equipment: Lv28,000.

PC No. 7

This PC has returned to Earth to receive an inheritance.

Nationality: American *Homeworld:* Ellis *Gravity:* Normal *Frontier/Core?:* Frontier
Gender: _____ (Sensational-looking) *Birthdate:* 2266 (age 34) *Mass:* 104 *Eyesight:* Exceptional *Hearing:* Average *Body Type:* Normal *Throw Range:* 144 *Coolness Under Fire:* 2 *Encumbrance:* 72 *Native Language:* English *Other Languages:* None.

First Career: Colonist (16 years) *Second Career:* None.

Attributes: *Size:* 18 *Strength:* 18 (Normal) *Dexterity:* 10 (Normal) *Endurance:* 11 *Determination:* 8 *Intelligence:* 5 *Eloquence:* 9 *Education:* 6 *Consciousness:* 5 *Life:* 10.

Skills: Ground Vehicle-4, Melee-4, Survival-3, First Aid-2, Sea Vehicle-1, P-suit-0, Sidearm-0, Swim-0.

Money and Equipment: Lv16,000.

PC No. 8

This PC has come to New York to make trade contacts.

Nationality: Japan *Homeworld:* Asteroids *Gravity:* Zero-G *Frontier/Core?:* Core
Gender: _____ (Sensational-looking) *Birthdate:* 2258 (age 42) *Mass:* 48 *Eyesight:* Excellent *Hearing:* Exceptional *Body Type:* Ectomorph *Throw Range:* 48 *Coolness Under Fire:* 2 *Encumbrance:* 20 *Native Language:* Japanese *Other Languages:* English.

First Career: Ship Crew (7 years) *Second Career:* Merchant (16 years).

Attributes: *Size:* 6 *Strength:* 4 (Zero-G) *Dexterity:* 18 (Zero-G) *Endurance:* 9 *Determination:* 14 *Intelligence:* 11 *Eloquence:* 10 *Education:* 21 *Consciousness:* 2 *Life:* 4.

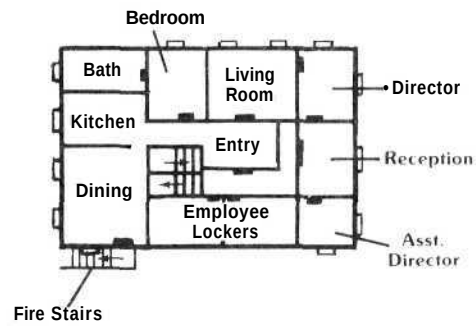
Skills: Appraisal-5, Ship Drive Engineering-4, Bargain-3, Information Gathering-3, Trader-3, Bureaucracy-2, Computer-2, Streetwise-2, Melee-1, P-suit-1, Sidearm-1, Pilot-0, Survival-0.

Money and Equipment: Lv23,000.

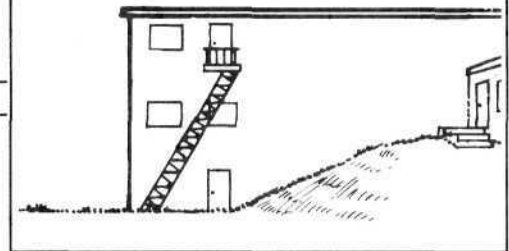


THE MUSEUM

Upper Level



Southwest View of Museum

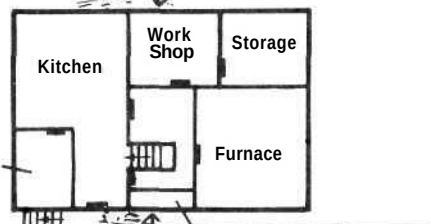


TREES

PARKING

ROAD

Slope



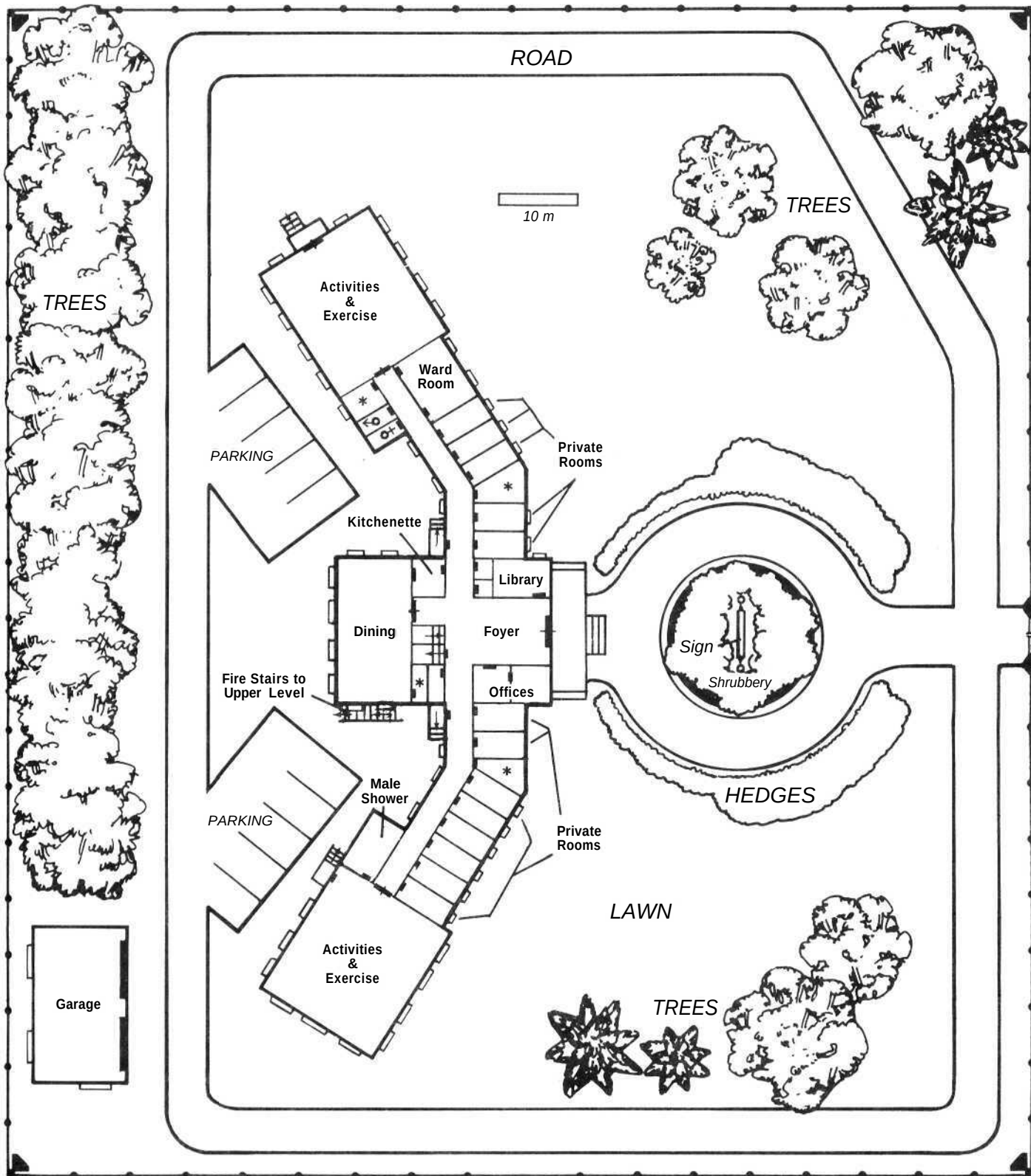
Underground

Basement Level

PARKING

Slope

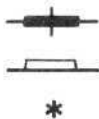
Garage



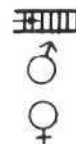
KEY



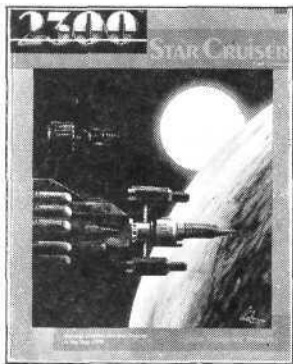
Stone
 Iron-Rail Fence
 Door



Double Door
 Window
 Storage



Stairs (down)
 Female Restroom
 Male Restroom



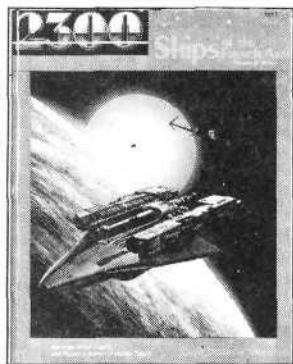
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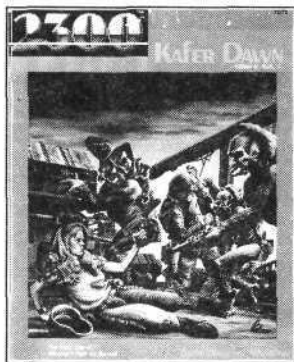
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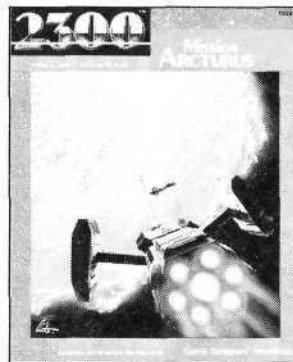
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