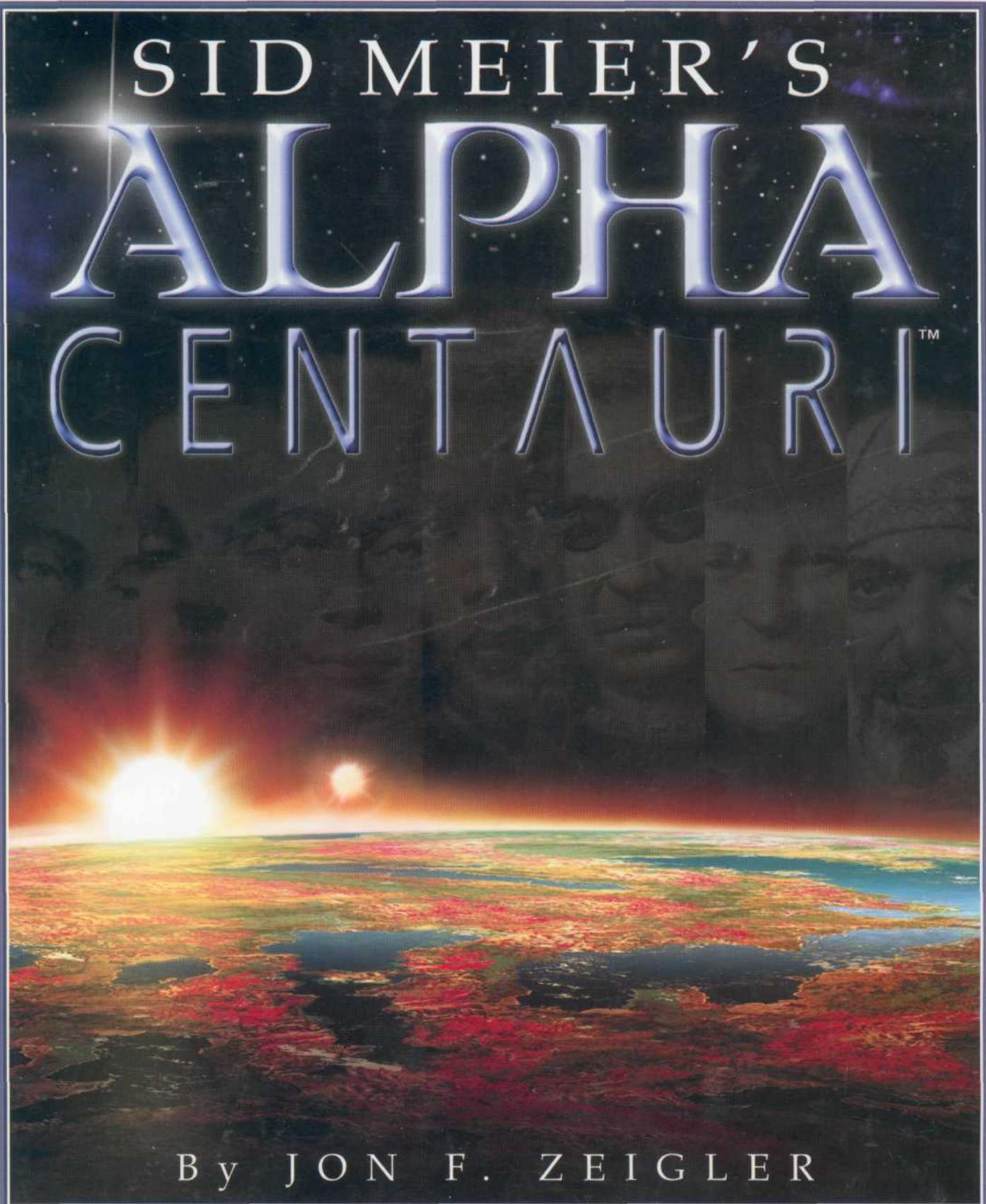


G U R P S[®]

SID MEIER'S
ALPHA
CENTAURI[™]



By JON F. ZEIGLER

STEVE JACKSON GAMES

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About GURPS

Steve Jackson Games is committed to full support of the *GURPS* system. Our address is SJ Games, Box 18957, Austin, TX 78760. Please include a self-addressed, stamped envelope (SASE) any time you write us! Resources include:

Pyramid (www.sjgames.com/pyramid/). Our online magazine includes new *GURPS* rules and articles. It also covers *Dungeons and Dragons*, *Traveller*, *World of Darkness*, *Call of Cthulhu*, and many more top games – and other Steve Jackson Games releases like *In Nomine*, *Illuminati*, *Car Wars*, *Toon*, *Ogre Miniatures*, and more. *Pyramid* subscribers also have access to playtest files online!

New supplements and adventures. *GURPS* continues to grow, and we'll be happy to let you know what's new. A current catalog is available for an SASE. Or check out our website (below).

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

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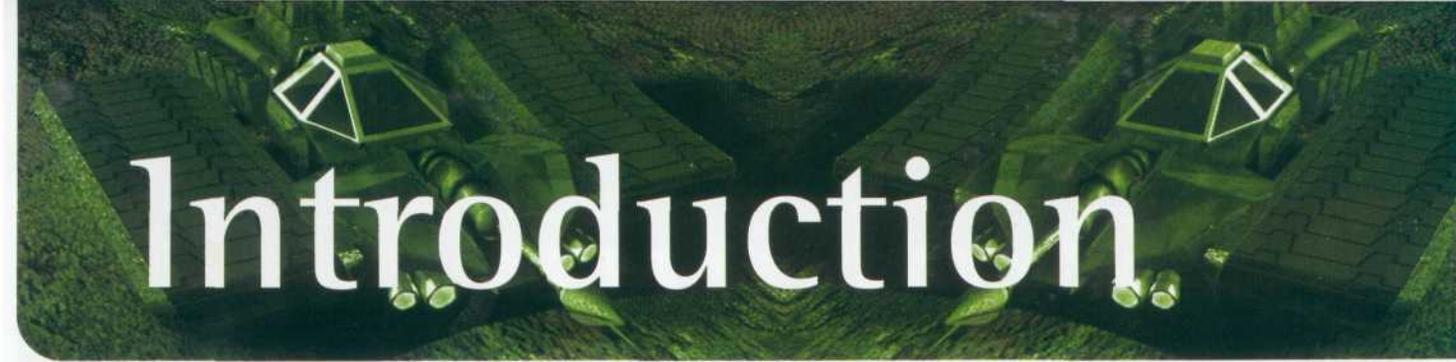
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GURPSnet. This e-mail list hosts much of the online discussion of *GURPS*. To join, e-mail majordomo@io.com with "subscribe GURPSnet-L" in the body, or point your web browser to gurpsnet.sjgames.com.

The *GURPS Alpha Centauri* web page is at www.sjgames.com/gurps/books/alphacentauri/.

Page References

Rules and statistics in this book are specifically for the *GURPS Basic Set, Third Edition*. Any page reference that begins with a B refers to the *GURPS Basic Set* – e.g., p. B102 means p. 102 of the *GURPS Basic Set, Third Edition*. Page references that begin with CI indicate *GURPS Compendium I*. Other references to *GURPS* books are BE for *Bestiary*, CII for *Compendium II*, P for *Psionics*, S for *Space*, UT for *Ultra-Tech*, and VE for *Vehicles*. The abbreviation for this book is AC. For a full list of abbreviations, see p. CI181 or the updated web list at www.sjgames.com/gurps/abbrevs.html.



Introduction

In the world of computer-based entertainment, there is a whole genre of “god games” in which the player can immerse himself in grand strategy. Guiding a nation, a culture, or an interstellar empire, he makes decisions that have consequences across whole worlds and centuries of time. In a sense this is roleplaying, even if the player is interacting only with his computer, even if the role he has undertaken is that of a dynasty or an entire civilization.

God games always require setting; otherwise, the crucial roleplaying experience fails. Sometimes the game has only a superficial story, just sufficient to lend historical flavor to an otherwise abstract exercise. On the other hand, sometimes you get a game like *Sid Meier's Alpha Centauri*.

Sid Meier's Alpha Centauri was a product of the fledgling studio Firaxis Games, and was first released in 1999. Designed by industry veteran Brian Reynolds, it was superficially similar to the best-selling *Sid Meier's Civilization II* released by Microprose Software in 1996. Yet for all the resemblance in the mechanics of play, the new game carried a rich and distinctive weight of story. Here were larger-than-life characters, grand ideological disputes, epic wars, deep philosophical speculations, and mind-shattering aliens. For once, a *computer game* proved capable of offering the “sense of wonder” that one usually finds only in the best fantastic literature.

It's this depth of back story that makes the *Alpha Centauri* setting an ideal candidate for another kind of roleplaying, the kind familiar to *GURPS* players. Zooming in for a closer view than the computer provides, we can take on the role of Chiron's forlorn colonists. We can

feel what it's like to survive in a hostile environment, build a civilization out of scraps, fight to the death to defend what we believe in, and in the end find a way to transcend the human condition forever.

Welcome to Planet. You've got your work cut out for you.

A Word About Genre

The designers and developers of *Sid Meier's Alpha Centauri* went to some effort to design a plausible science-fictional setting. Some of the technologies were extrapolated from known scientific principles. The physical parameters of the Alpha Centauri star system and its single habitable planet were developed in detail. Even the biochemistry of Chiron's native life was worked out in support of the computer game's back story.

As a result of this work, the *Alpha Centauri* setting works as science fiction. Nevertheless, the background was designed in the context of a *computer game*, which had its own mechanics and overriding plot. In the end, the developers of *Sid Meier's Alpha Centauri* had a specific story they wanted to tell. Setting details were developed to support that story, whether or not they would make sense when examined in the finer detail necessary for a *roleplaying game* treatment.

GMs and players approaching the *Alpha Centauri* setting are therefore advised to treat it not as rigorous “hard” science fiction, but as unabashed space opera. Chiron is a world that Robert Heinlein, Frank Herbert, or E. E. “Doc” Smith might well have created. The lines between good and evil are sharply drawn. Whole societies are dominated by extreme ideology. Scientific research solves all the world's problems, and eventually brings about human transcendence. Characters gain access to superhuman powers, such as telepathy and the ability to commune with machine intelligence. Technologies define human cultures. Aliens are always mysterious and often terrifying.

In this context, *GURPS Alpha Centauri* is geared toward providing a setting for fast-paced action-adventure in the space-opera tradition. There is certainly room on Planet for every kind of adventure, from puzzle-solving mysteries to political intrigue to two-fisted military action. Still, the world works best if players and GM concentrate on *story* rather than rigorous details of the setting. Don't fret too long about suspension of disbelief – pull out your impact rifle and run to the sound of the guns!

– Jon F. Zeigler

About the Author

Jon F. Zeigler has been a science fiction fan since the cradle (literally). He has been playing roleplaying games since about 1980. In 1988, he discovered *GURPS* and hasn't looked back since. He is also a dedicated player of “god games” and has spent far too many hours playing *Sid Meier's Alpha Centauri*. He, his wife, and two children live in Maryland, where he works as a computer security consultant. He has written several other books for *GURPS* and has also done freelance work for other games publishers.

1. Prologue

*And I looked, and behold a pale horse:
and his name that sat on him was Death,
and Hell followed with him.*

– The Conclave Bible, Datalinks

The story of Alpha Centauri begins with the *Unity*, the first and last starship to be built on Earth. The *Unity* mission was a triumph of human ingenuity and engineering. It might have been the means by which humanity shook off the bonds of Earth and took its place among the stars. Unfortunately, the mission was not executed in triumph, but in sheer desperation.

Earth

Early in the 21st century, the long economic boom of the Industrial Age came to a crashing halt. Western civilization and its imitators had based all of their economic calculations on the assumption that Earth and its resources were infinite, free of cost. By the 2020s, it was obvious that Earth's bounty was finite after all. Climate change and the depletion of supplies of fresh water were devastating agricultural regions worldwide, while decades of overuse left the world's fisheries impoverished. By 2025, famine was sweeping the Third World, and even First-World nations were faced with food shortages.

Meanwhile, the world's run on fossil fuels was having dire consequences. Petroleum deposits were still being discovered, but were increasingly difficult to exploit; a steep rise in oil prices was throwing the industrial nations into deep

recession. Developing nations such as India and China were burning coal to fuel rapid industrialization. The result was a vast holocaust of coal, with the consequent release of greenhouse gases and pollutants.

Politics

As famine swept the world and the industrial economy was rocked with shortages, every nation on Earth was faced with instability and rebellion. Even relatively prosperous nations had episodes of violent unrest, such as the left-wing coup that killed off

the British monarchy in 2029, or the spasm of urban violence that wrecked the city of Los Angeles in 2036. In much of the world, civil government simply vanished beneath the tide of human desperation.

Of course, there was also formal war. Russia underwent a period of nationalist revival, fighting both China and the United States. The Crusader Conflicts decimated the Middle East, as Christians, Jews, and Muslims engaged in years of genocidal struggle. Finally, the old discord between India and Pakistan flared up into the Twelve Minute War, a



nuclear exchange that killed almost half a billion people. By 2050, it was obvious to many that civilization was doomed - and that it might take all of Earth's life down with it.



The UNITY Mission

Amid the chaos, there were some outposts of hope. In the early 21st century, several nations had built a permanent presence in space. There were small "orbital cities" circling Earth, great factories processing the loot of the asteroids. The Moon and Mars had been colonized. None of these ventures were likely to be self-sufficient in the event of Earth's collapse, but they were reason for cautious optimism.

In the late 2040s, some of Earth's leaders were looking even further afield. Telescopes revealed the presence of an earthlike planet in the nearby Alpha Centauri star system, and U.N. leaders proposed that a starship be built to carry several thousand scientists, engineers, and colonists to that distant world. If all

The UNITY

The *Unity* was the paramount achievement of Earth-bound civilization. Most of it was built using cutting-edge TL9 technology. The Stardrives were designed by Prokhor Zakharov, one of the greatest scientific geniuses in Earth's history, and were effectively TL10 "Superscience" equipment (see p. S117). The actual cost of the ship and its contents was many times the effective price given in the statistics below (on the order of \$100 billion).

The starship was launched with a 5.3-hour high-acceleration boost, after which it was almost a million miles from Earth and traveling at over 100 miles per second. At this speed, the ship could deploy its Bussard ramjet, using the thin hydrogen gas of deep space for fuel. The second stage of acceleration used the ramjet and lasted for over a year, bringing the ship to its cruising velocity of about 11% of light speed. The original mission plan involved a turnover in interstellar space, followed by slow deceleration using the ramjet scoop fields to "brake" against the interstellar medium. Final entry into the Alpha Centauri system and insertion into Chiron orbit would be accomplished using the fusion rocket. The ship's supply of fuel and reaction mass was calculated with extreme precision, leaving almost no room for error.

On board, most of the 10,000 crew and colonists entered cryosleep even before launch, with only a skeleton crew remaining active until the ramjet deployed. Crew quarters on board were extremely austere. Not even the captain had his own cabin, and any on-duty crewman who needed to sleep did so in his (deactivated) cryocell. The mission plan assumed that even in emergencies, only a few crew or colonists would need to be awake before the final landing on Chiron. *GURPS Space* statistics for the *Unity* are as follows:

Crew: 310 Command; 440 Engineering; 300 Life Support; 600 Maintenance; 200 Medical; 200 Service; 600 Security. Total: 2,650.

Design: 10 million cf USL hull, with heavy compartmentalization and robotic structure options. cDR 1.

Systems: Large bridge/9; medium bridge/9 (backup); 2 enhanced sensors/9, with astronomical/8+ and planetary survey/9+ add-ons; 600 fusion rocket/10; 1,600 super Bussard ramjet/10; 11,600 fuel tanks; 12 fusion power/9; fusion core/9; fusion core/10; 500 freeze tube/9; 900 total life support/9; 40 complete workshop; 14 large entry module; conference room; 20 lab; 20 surgery; 8 vehicle bay (for *Unity* landing pods); 1,200 cargo; 43 empty.

Statistics: EMass 18,700 tons; LMass 112,000 tons. Cost \$8.2 billion. cSM +2; ASig +2; PSig +2. Hull cHP 4,200.

Performance: sAccel: 0.86 G on fusion rocket, 0.09 G on Bussard ramjet. Burn Endurance: 10.7 hours on fusion rocket, infinite on Bussard ramjet.

went well, the massive effort might help reunify the nations of Earth. If the worst came to pass, the colonists would be safely away from Earth's catastrophe finally claimed billions.

Despite every obstacle, the *Unity* was built in high Earth orbit. Some nations contributed out of hope, for 40 years.

UNITY Landing Pod

Each *Unity* landing pod was an independent spaceship, although they were never intended for long-range flight. Instead, they were designed to be used in the final exodus from the starship down to Chiron. After that, they would never fly again; in fact, they were designed to be cannibalized after landing. This proved useful to the colonist factions after Planetfall, although the actual landings were much less organized than the mission plan had envisioned . . .

GURPS Space statistics for the landing pods are as follows:

Crew: 1 Command; 1 Pilot; 1 Maintenance; 2 Specialists. Total: 5.

Design: 200,000-*cf* SL hull, with heavy compartmentalization option. *cDR* 1.

Systems: Medium bridge/9; basic sensors/9; 20 nuclear pulse drive/9; 60 fuel tanks; 3 fusion power/9; fusion core/9; 80 passenger seats/9; 4 large entry module; 147.5 Cargo. **Statistics:** EMass 473 tons; LMass 1,930 tons. Cost \$41.64 million. *cSM*

-1; ASig-1; PSig-1. Hull *cHP* 375. **Performance:** *sAccel*: 1.04 G.

Burn Endurance: 1.03 hours. Air Speed:

2,450 mph.

Disaster!

Later, some of the colonists realized how miraculous a successful journey would have been. The mission had been planned in haste and with no margin of error. Any mishap might have doomed the crew. As it happened, the bulk of the journey did go by without incident - but in late 2099, as *Unity* was decelerating into the Alpha Centauri system, it collided with a tiny fragment of space debris. The interloper was no larger than a pebble, but at the starship's speed even such a small missile could have devastating impact.

One of the eight cryobays was completely destroyed, killing hundreds of colonists and crewmen. Damage to other parts of the ship was widespread, if not crippling. The greatest hazard lay in damage to the ship's fusion drive. The master computer had shut down the drive rather than allow it to tear the ship apart - but now, so close to journey's end, there was no way for the *Unity* to stop. If nothing was done, the starship would fly through the Alpha Centauri system and be forever lost.

Captain John Garland and his command staff were automatically roused from cryosleep, four days before the final flyby of Alpha Centauri.

Quickly, they assessed the damage. Chief Engineer Prokhor Zakharov swore that he could repair the drive if enough of his engineering staff could be awakened to perform the necessary work. Other crew were awakened to assist.

Factional Divisions

Unfortunately, not all of the crew were cooperative. Disputes over the repair strategy exposed deep ideological divisions among the crew. Finally, Colonel Corazon Santiago mutinied against her superiors, leading a crew faction that was determined to seize the means of survival at any cost. Her "Spartans" broke into the armory, seized Chief of Security Sheng-Ji Yang, and attacked engineers working on repairs to the drive. Soon, exchanges of gunfire were taking place throughout the ship.

After a tense standoff near the hydroponics greenhouse, Colonel Santiago was captured and the Spartan threat seemed over. Captain Garland went off-watch for a brief rest, to wash some of the stimulants out of his system and prepare for the final attempt at deceleration.

While waiting for the Captain's return, Chief Engineer Zakharov made a fateful proposal: if control of *Unity* could not be reestablished, each leader among the crew should take one of the landing pods, break away from the starship, and make an independent attempt at a landing. In preparation for this, crew and supplies should be divided among the landing pods at once. The command crew discussed the proposal, some favoring it, others opposed. Unfortunately, just as they moved to summon Captain Garland, another piece of sabotage struck the command module itself. A sonic hammer exploded, wrecking the module and nearly killing several of the command crew.

With that, there was no longer any hope of saving the *Unity*. All the remaining cryocells were ordered open, and the bulk of the crew awoke into a dying starship. Frantically, the crew and their leaders made their way to the landing pods, hoping that they could be released in time. Captain Garland made a last desperate attempt to gain control of the situation, but was shot by a renegade crewmember. His last action was to trigger the explosive bolts holding the landing pods in place, allowing the crew to attempt to reach Chiron.

Scattered Tribes

In the end, most of the crew survived even as the *Unity* plunged to a fiery death on the planet's surface. Each landing pod made its way to the surface, carrying a few hundred crew and whatever equipment could be gathered at the last minute. Each pod landed far from the others, as the factional divisions among the crew bred distrust.

All contact between the human castaways was lost. Each group struggled for bare survival, directed by one of the leaders from the *Unity*. Under the pressures of the early years, each group developed its own distinctive ideology. Each was determined that it, and if necessary *it alone*, would win a future for all humankind.

2. Planet

In the past 30 years, we have used our telescopes to gather a few terabytes of information about the target world. On this basis, we glibly call Chiron "earthlike." I want you to consider for a moment what that means. Chiron has gravity not too much higher than we find comfortable, an atmosphere containing water and free oxygen, a surface climate that we can tolerate. That's all. Billions of years of separate evolution have inevitably made Chiron a greater challenge than we can imagine. Even the familiar will be alien.

*— Captain John Garland, initial address to the **Unity** crew, 2058*

Astrophysics

The Alpha Centauri star system is somewhat older than Sol, but is similar in chemical composition and physical properties. The most significant difference is that Alpha Centauri is not one star, but three.

Alpha Centauri

The brightest member of the Alpha Centauri system is Alpha Centauri A, simply called "the sun" by the colonists. It is of the same spectral class as Sol and emits the same comfortable yellow-white light. It is somewhat more massive than Sol and significantly brighter.

Alpha Centauri B was named *Hercules* by the colonists, after the Greek hero who was a great nemesis of the mythical Centaur race. Hercules is a smaller, cooler star, with light more orange in color than that of its partner.

Alpha Centauri A and B orbit around their mutual center of mass, somewhere in the space between. Every 80 Earth years, Hercules comes within 11.4 AU of the sun, or somewhat more than the average distance between Sol and Saturn. At their most distant, the two stars are about 35.8 AU apart, or a little less than the average distance between Sol and Pluto.

An observer on Chiron will always see Hercules as the brightest of the "fixed" stars, between 140 and 1,400 times as bright as a full moon on Earth. Even at its most distant, Hercules is more than bright enough to read by at night. At its closest, it has a small but measurable effect on Chiron's climate. The 80-year cycle of Hercules' close approaches gives rise to "grand seasons" on Chiron, affecting the growth and behavior of native life forms.

Alpha Centauri C is much smaller than its two partners. It is a *red dwarf star*, only a small fraction of Sol's mass and less than one ten-thousandth as bright. It is remarkable primarily for its very low mass, and for its nature as a highly active *flare star*. From hour to hour, Alpha Centauri C experiences constant stellar flares, any one of which may as much as double its normal brightness.

Alpha Centauri C was once called *Proxima Centauri*, since it is significantly closer to Earth than the A-B pair. In fact, for many years it was suspected to be an independent wanderer, close to the A-B pair out of sheer happenstance. The *Unity* expedition was the first to prove otherwise. As it turns out, Proxima does orbit the A-B pair, but at a tremendous distance. It never approaches more closely than 0.25 ly, and takes over half a million Earth years to complete one cycle. From Chiron, Alpha Centauri C is a dim star lost among the galaxy's millions, only visible to the naked eye if the observer knows precisely where to look. As such, it was never given a mythological name of its own, and was called simply "C" or "Proxima" by the colonists.

Other Planets

The presence of Hercules in the Alpha Centauri system is ironically appropriate. Its mythical namesake killed a number of Centaurs during his career. The star Hercules is probably responsible for destabilizing the orbits of several planets which once circled Alpha Centauri A.

As it stands, Alpha Centauri A has only one planet other than Chiron. The planet *Eurytion* orbits A at a distance of 0.47 AU, somewhat greater than the average distance between Sol and Mercury. *Eurytion* is quite similar to Mercury in many respects, about half again as massive and slightly denser. Due to the long-term effects of solar tides, *Eurytion* does not rotate with respect to Alpha Centauri A. Its "day face" is fiercely hot, with temperatures high enough to melt lead in places. On the other hand, the planet's "night face" is bitterly cold, with temperatures falling very close to absolute zero at the point furthest from the sun.

Eurytion is a treasure world, dense and rich in heavy metals, with traces of frozen water and other volatile compounds on its night face. Late in the history of the Chiron colony, the various human factions established outposts there.

Aside from *Eurytion* and Chiron, there are no planets of significant size circling Alpha Centauri A. Chiron has two moons, named *Nessus* and *Pholus*. *Pholus* is the inner moon, with about 1/5 the diameter and 1% the mass of Earth's moon. Its orbit is almost a perfect circle, with a radius of about 60,000 miles. Its *synodic month* (the period from one full moon to the next) is played almost no part in the history of humanity on Chiron. 3.7 local days, and there are 144 such months in the course of Chiron's

Moons

Gravity and Character Action

Planet's higher gravity requires several adjustments to the standard *GURPS* rules. Some of these will only apply in campaigns where colonists have just arrived on Planet and are still adjusting to the gravity. Others apply to all *Alpha Centauri* campaigns, in any period.

Mass, Weight, and Encumbrance

For each object or item of equipment listed in this book, *mass* in pounds is given rather than *weight*. Likewise, the usual procedure for determining a character's weight (see p. B15) actually yields his mass. On Earth, mass and weight are equal when each is measured in pounds. On Planet, an object's or person's weight is always equal to *1.3 times its mass*.

This fact most often comes into play when figuring encumbrance. To determine someone's encumbrance level on Planet's surface, use the following procedure. First, multiply the mass of all carried items by 1.3 to get their weight. Second, multiply the person's body mass by 0.3 and add the result to the weight of carried items. The sum is the total weight that counts toward encumbrance. Compare this weight to his ST score (per p. B76) to determine encumbrance level.

Example: A terraforming engineer carrying equipment that masses 20 lbs. is carrying 20 lbs. x 1.3 = 26 lbs. of weight. If he masses 150 lbs., then he is carrying another 150 lbs. x 0.3 = 45 lbs. of weight. Total weight for encumbrance purposes is 71 lbs. If the engineer has ST 10, then he has heavy encumbrance!

Other Gravity Effects

When adventurers throw objects or jump, divide the distance achieved by 1.3. For example, a colonist capable of a 16-foot broad jump on Earth will only be able to jump 12 feet on Planet. The statistics for ranged weapons given in Chapter 6 are not corrected for Planet's gravity. For extra realism, divide Max range for *projectile* weapons by 1.3 as well. Beam weapons are not affected.

On the other hand, *multiply* all falling damage by 1.3!

Planet's higher gravity gives most new visitors -1 to DX. G-Experience (p. CI25), Improved G-Tolerance (p. CI26), and G-Intolerance (p. CI81) will all modify the severity of this penalty; G-Intolerance will also result in IQ and HT penalties. Attribute penalties disappear after a few months or years on Planet; therefore, they are only likely to matter in campaigns set immediately after Planetfall.

year. Pholus is a battered-looking moon, gray and cratered, which moves visibly against the background stars.

Nessus, the outer moon, has about 1/2 the diameter and 9% the mass of Earth's moon. Its orbit is also nearly circular, with a radius of about 124,000 miles. Its synodic month is 10.6 local days, and there are 50 such months in a local year. Nessus is relatively bright, with several large craters associated with "rays" of reflective dust.

The orbits of Nessus and Pholus fall in the same plane, and the orbital radius of Nessus is almost exactly twice that of Pholus. As a result, the two moons appear to be roughly the same size from the surface of Chiron, each a little smaller than the Moon once appeared in Earth's sky. Each moon partially eclipses Alpha Centauri A from time to time (they are too small to cover the sun's disk entirely). Far more frequent are lunar eclipses, in which one or the other moon moves through Chiron's shadow. Even more frequent are the occasions on which Pholus passes in front of Nessus from the point of view of observers on Chiron.

Planetary Parameters

Alpha Centauri A-II was known in Earth's astronomical databases as *Chiron*. This mythological name fell out of favor during the early years of the settlement, but the divided colonists were unable to agree on a new name. Eventually Chiron came to be called simply *Planet*, an innocuous name that offended no one.

Planet is about 20% larger than Earth, with an equatorial diameter of 9,370 miles. Planet's larger heavy-metal core gives it an average density 11% higher than Earth's. The result is significantly higher surface gravity, 30% greater than that of Earth. The colonists suffered a variety of effects due to this higher gravity.

Planet spins quite rapidly on its axis, giving it a day of only 17 hours, 32 minutes. Unlike Earth, Planet has

Atmosphere and Character Action

Planet's atmosphere is a paradox: much denser than Earth's, yet much poorer in oxygen. Unless somehow adapted to the atmosphere (as through genetic engineering), a colonist should wear his air mask or respirator at all times. Anyone exposed to the atmosphere without protective gear will have difficulty breathing. As well, the nitrogen oxides and high partial pressure of nitrogen in the atmosphere are mildly poisonous.

A human exposed directly to Planet's atmosphere will suffer from inert-gas narcosis. The effect is that of happy drunkenness: roll vs. IQ every 30 seconds to avoid -3 to all Will rolls and 2 to all other IQ- and DX-based rolls. He will not realize that he has become irrational, but any observer can easily tell!

Anyone working in the open without a respirator will also suffer from slow oxygen deprivation. All fatigue effects due to movement or exertion are *doubled*. Above 4,000 feet altitude, anyone exposed to the atmosphere will suffer a minimum of 1 fatigue per minute, and the fatigue effects of movement and exertion are *quadrupled*. Anyone who falls unconscious due to exposure will start to suffocate, and will die within 4 minutes regardless of current or initial HT. The only way to save his life is to give him sufficient oxygen.

an insignificant axial tilt and so exhibits almost no seasonal variation. The colonists noticed the short days just after arrival, but they quickly acclimated themselves. Most colonial societies settled on a "six hours on, four hours off, eight hours rest" cycle, with slightly shorter "hours" to make the total a round 18 hours a day.

Planet's orbital radius is 1.32 AU, significantly larger than that of Earth. The local year (the time to make one orbit around Alpha Centauri A) is only slightly longer than Earth's year.

One Planet year is 532 local days long. Since there is no significant seasonal cycle, the colonists rarely used the local year as a measure of time. Instead, they used the "Mission Year," which was equal in length to the Earth year, and used the same system of reckoning. Thus, the *Unity* arrived in the Alpha Centauri system in Mission Year 2100. One Mission Year was just over 500 local days long; the colonists added one or two local days to each Mission Year as needed, to keep in sync with the Earth year.



Physical Environment

In one sense, Planet presented no surprises. It had evolved under the same laws of physics that had shaped Earth, and many of its features were similar. On the other hand, the two worlds had evolved separately for billions of years, so even when there were large-scale similarities, there were countless differences in detail.

Atmosphere

Planet's atmosphere is much denser than Earth's, with a total pressure of about 1.7 standard atmospheres at sea level. With an earthlike mix of gases, this atmosphere would be breathable, but Planet's atmospheric composition is very unlike Earth's. Less than 9% of the atmosphere is free oxygen, yielding a partial pressure of oxygen about 70% that of Earth's atmosphere. This makes Planet's atmosphere *barely* breathable - at sea level, and provided one refrains from strenuous activity. The partial pressure of oxygen falls off quickly with increasing altitude (another effect of the high surface gravity), making the air completely unbreathable at only a few hundred feet above sea level.



Pelagic Terraforming

The settlers went to great lengths to exploit the natural resources of Planet's oceans. The first offshore engineering projects took place very early in colonial history. These works became more and more elaborate as time passed.

Kelp Farms: During Earth's final century, humanity started to farm the Earth's rich ocean life systematically. Seaweed, kelp, plankton, fish - all were carefully cultured and harvested for vital nutrients. Many varieties of Earth-born sea life were brought to Planet and used to create similar "farms" there. Earth life did quite well in Planet's oceans, spreading to join the wild ecology all around the continental margins. Indeed, in later years (after the colonists learned to extract useful resources from the native xenofungus), kelp was sometimes regarded as a "trash weed."

Tidal Harnesses: The colonists soon learned to tap the tides as an energy source. A tidal harness was a long barrier stretching across shallow water just offshore. As solar and lunar tides moved seawater, the movement was used to run massive generators. Tidal harnesses were expensive, but clean and utterly reliable.

Mining Platforms: As on Earth, the floor of Planet's seas often yielded impressive amounts of valuable mineral resources. Ambitious colonists soon began to build mining platforms: floating bases for the exploitation of sea-

The partial pressure of nitrogen is very high, however: over twice that found in Earth's atmosphere. Worse, the air contains significant quantities of nitrogen-oxygen compounds - much less than 1%, but enough to cause inert-gas narcosis after prolonged exposure.

Surface Water

Planet, like Earth, is a water world. Over 70% of the surface is covered by water, in a pattern of oceans, seas, and freshwater lakes similar to that of

Earth. The main difference between the two worlds lies in ocean circulation patterns. Planet has no significant polar ice caps; therefore, there is no bottom current to carry cold polar water toward the equator. Instead, warm, salty, oxygen-poor water sinks slowly at the equator and is carried toward the poles.

The deepest reaches of Planet's oceans have almost no dissolved oxygen, and so resemble Earth's Black Sea on a worldwide scale. There is no oxygen-breathing life in the ocean depths. On the other hand, there are plenty of deep-sea volcanic vents to support life forms that metabolize sulfur, just as similar life forms do on Earth.

Weather on Planet is often quite violent, driven by higher surface temperatures and the world's rapid rotation. Much of Planet receives abundant rainfall, and in fact the tropic zone is almost always shrouded in cloud. The warm tropical oceans breed hurricanes, which hammer the continents with high winds and intense rainfall.

Agricultural Terraforming

The first order of business after Planetfall was to secure a food supply. Few native life forms were edible without extensive processing, so wide tracts of land were turned over to Earth-style agriculture.

Farms: Terraformers devoted much time and energy to converting wilderness to farmland. Native flora had to be eradicated and plowed under, and irrigation systems had to be built. Once Earth-born crops were planted, they required constant attention to protect them from native diseases and marauders. This work was labor-intensive at first. Even after the spread of agricultural robotics, farmers lived out on the land for weeks or months at a time.

Forests: Terraformers sometimes planted Earth-born trees across wide ranges of territory. The resulting forests were a viable source of fruit, wood, and other resources. Some of the trees were genetically modified to extract materials from the soil and concentrate them, and to synthesize a wide variety of useful substances. As with the kelp farms, forests thrived on Planet, spreading rapidly into the wild ecosystem and even displacing **xenofungus**.

In later years, the colonists improved their crop trees by splicing in genes from Planet's native life. The resulting forests were so productive as to encourage the "paving" of Planet's surface with trees. Forests were among the most successful terraforming efforts, and every faction among the colonists used them,

Condensers: Some regions of Planet's surface received too little rain to support intensive agriculture. Irrigation water had to be brought in from vast distances and carefully conserved. Eventually, the colonists learned how to construct large systems of wind traps that efficiently extracted moisture from the air, allowing the cultivation of relatively arid land.

Soil Enrichers: Planet's soil was often difficult to farm, and tended to lose its fertility quickly unless sophisticated farming techniques were applied. After many years, the colonists developed a variety of systems that could maintain soil fertility despite intensive

Resource Exploitation

Much of the terraformer detachments' work involved the construction of energy- or mineral-producing facilities.

Mines: As on Earth, where veins of valuable ore were discovered, mining operations soon followed.

Solar Collectors: Before the development of cheap fusion power, most colonial bases were powered by solar-power or windmill farms. Solar cells, tilted to catch the sun as efficiently as possible, covered acres of landscape. Other regions, enjoying consistently strong winds, saw the construction of vast windmill farms. Both techniques were usually applied at high elevations, where winds were more consistent and cloud cover was less likely to interfere.

Echelon Mirrors: With experience and improving technology, the colonists developed methods for improving the efficiency of solar-power farms. An echelon mirror system used a complex arrangement of lenses and mirrors to focus solar energy more intensely on high-efficiency solar cells. The result was a significant increase in solar-cell output over a wide region.

Roads: Most of Planet's ground vehicles were capable of off-road travel, but movement along a paved road was still more efficient. Indeed, the first phase of human development in a region was usually the construction of a road. Road crews were the romantic epitome of the terraformer's lifestyle, working for months or years out in the wilderness, with little support from home.

Mag Tubes: Later in Planet's history, roads were supplemented by "mag tubes": networks of high-speed mag-lev trains connecting the largest bases. **A**

Terrain

Planet is tectonically active, with a number of crustal plates in constant motion. As on Earth, the results include slip faults, subduction zones, and active mountain-building regions. Planet has young, sky-vaulting mountains like the Alps or Himalayas, old weathered hills like the Appalachians, and everything in between.

Most of Planet's land mass is characterized by flat plains and rolling hills, with occasional regions of rocky outcrops. Planet's soil is relatively poor in silicates, which (as in Earth's tropic zones) are leached out of the soil by warm rainwater. The result is an alumina-rich soil, which is acceptable for rain forests but which inhibits agriculture. In the polar zones, the soil is richer in silicates, but it is also acidic and rich in organic matter, like the *podzols* of Earth; this soil, too, is difficult to farm. There is a narrow band of rich land analogous to the temperate soil zones of Earth, but even here the soil is likely to be sandy or lime-rich rather than dense with useful clay.

Offsetting these factors is the wealth of nitrates in Planet's soil. If the soil can be worked and its acid-alkaline balance maintained, then it can have immense nutrient value for Earth-born crop plants. However, these nitrates also exist in Planet's groundwater, making it somewhat toxic to Earth-born animals. Processing groundwater to make it potable is straightforward but energy intensive.

Landmarks

Planet boasts a number of regions which are unusual in some respect. These areas yielded special resources and were sought-after sites for colony bases. A few of these features were clearly artificial in nature - signs of massive alien engineering projects in the distant past.

Borehole Cluster

In one area, the colonists found unmistakable evidence of past engineering of Planet's surface: three

thermal boreholes drilled through Planet's crust, about 200 miles apart. The boreholes were somehow being maintained against local geological forces, and remained useful despite the thousands (or even millions) of years since their construction.

Fossil Ridge

One of Planet's many pseudo-coral species has created a massive reef, stretching for hundreds of miles, rather like Earth's Great Barrier Reef.

Freshwater Sea

Most of Planet's oceans are salty, but one small sea is unusually fresh and hospitable for Earth-born life. Fisheries and kelp farms in the Freshwater Sea are particularly productive.

Garland Crater

Long before Planetfall, a small planetoid slammed into Planet, leaving a vast impact crater. The region's ecology was devastated, and had yet to recover when humans arrived. The

remnants of the impactor lie close to the surface, and are a rich source of industrial metals.

Geothermal Shallows

One of Planet's continental shelf regions is an area of intense geothermal activity. A scatter of underwater geysers betrays the presence of fierce heat under the sea bottom.

Great Dunes

Most of Planet is moist and green with life (or crimson with fungal mats). One region is a vast, harsh wasteland comparable to the Gobi or Sahara deserts of Earth. Agriculture is impossible, and even the native life is extremely sparse.

Manifold Nexus

A cluster of mysterious ancient ruins, the Manifold Nexus eventually proved to be the central communications point for all of the alien engineering projects on Planet; in effect, a control center for Planetary intelligence.

Bases

For all the intricacy of Planetary terraforming, the core of human civilization was always its bases. Frontier settlements at first, later towns and even cities, the bases were where most human activity took place.

The first bases were founded where the *Unity* escape pods landed. Indeed, the escape pods themselves either were broken up for construction materials or became integral parts of the base structure. Each of these ramshackle settlements held about a thousand people. Quarters were cramped, and facilities were primitive and hard to maintain.

As time went on, new facilities were built. Recycling tanks allowed more efficient use of resources and helped improve quality of life. A children's creche and recreation commons helped lay the foundation for a healthy society. Research facilities might be constructed, such as a network node or a biology lab. A perimeter defense network knitted sensors, traps, and walls into an integrated system. Military units built their first command posts.

Populations grew slowly, at an average of less than 2% per year. A generation after Planetfall, the first bases sent out colonial expeditions. New bases were placed to exploit resources discovered by earlier reconnaissance, or to seize control of strategic territory before some other

faction could do so. In this manner, each faction spread slowly across Planet's surface.

Bases were rarely located less than 1,000 miles apart, and distances were often much greater. As a result, each base tended to be a self-contained frontier town. Base citizens all knew each other, at least by sight, and tended to trust one another more than any outsider. They were loyal to faction ideology, but in practice developed insular, tight-knit communities with their own customs. Bases distant from faction headquarters were often stubbornly independent and likely to resent central interference.

In time, the most prosperous bases became towns and then actual cities, with populations in the millions. Outposts that provided shelter for terraforming crews or military units became secondary communities in their own right. In the last years before the end of the Human Era, the human population of Planet reached about 1 billion. Most of the increase took place in the last century of settlement, when prosperity and high technology made rapid population growth feasible. Even in this final period, when humanity seemed ready to attain mastery of the physical universe, Planet had large tracts of empty wilderness.

Macroengineering

Much of the "terraforming" undertaken by the colonists involved simple land development of the kind employed on Earth for centuries. Over time, however, the colonists embarked on much more ambitious projects, changing the very shape of Planet's surface.

Aquifer Drilling: As on Earth, vast quantities of fresh water are locked beneath Planet's surface in *aquifers*: strata of water-bearing porous rock. Terraformers sometimes drilled down to these aquifers to encourage the water to spring to the surface.

Thermal Boreholes: Large-scale mining projects sometimes drilled entirely through Planet's crust, approaching the hot, mineral-rich mantle. Such projects ran the risk of considerable ecological damage, but could yield vast quantities of geothermal energy and mineral wealth.

Landform Sculpting: Terraforming's crowning achievement was the wide-scale sculpting of Planet's surface. A region could be significantly raised or lowered in elevation by manipulating geologic forces. This technique was most often used offshore, extending the shallow continental shelves so as to extend the productive expanses of the ocean. Raising land from the ocean to produce new productive landmass was another common application.

Monsoon Jungle

Fed by almost-constant rainfall off the nearby ocean, the Monsoon Jungle is a region of dense vegetation. Here, the native plant life grows to heights unmatched anywhere else on Planet, and the undergrowth forms several layers of habitat for different animal species. Planet's biodiversity is at its highest in the Monsoon Jungle.

Mount Planet

The highest mountain on Planet is an immense shield volcano, similar to Earth's Mauna Loa or Mars' Olympus Mons. Mount Planet remains active, but its slopes offer both mineral resources and a bounty of geothermal energy. Bases located around the mountain's slopes became primary industrial centers.

New Sargasso

The largest mass of fungus on Planet is actually in the deep ocean, where thick sea fungus grows in a field over a thousand miles across. Many *Unity* supply pods (p. 14) were tangled in the region's sea fungus.

Pholus Ridge

Planet exhibits plate tectonics much like those of Earth. In one region, a continental plate is sliding

over an ocean plate, sending the lower plate down into Planet's mantle. The result is earthquakes and mountain-building activity all along the line of Pholus Ridge.

The Ruins

In the midst of one of Planet's largest and thickest xenofungus zones, there stood a ring of monoliths (p. 21) several hundred miles across. In the center of the ring was a zone free of fungus, suitable for settlement and farming.

Sunny Mesa

This natural highland has no special resource value, but its altitude and unusually clear weather make it a superb site for solar power collection.

UNITY Wreckage

Scattered across hundreds of miles of landscape, the wreckage of the *Unity* is almost unidentifiable. The colonists who first located the wreckage were able to salvage a few pieces of equipment, and recover computer records from the remains of the command module.

Uranium Flats

This expanse of grassland is the site of rich deposits of uranium and other heavy metals.

Native Life Forms

Planet's native life is based, like Earth's, on DNA and proteins built of right-handed amino acids. Earth-born life can adapt and find a niche within the native ecology, but at the same time Planet's life forms can compete fiercely with the offworld invaders.

Ecology

Planet's geochemistry contains relatively little carbon and oxygen but a plenitude of nitrogen and nitrogen compounds. This drives local plant life to economize on the use of carbon in structural material and energy-storage compounds. Plants do photosynthesize, but instead of making sugars as Earth-born life would do, they use an exotic chemical reaction to store energy in organic nitrogen compounds.

As a result, much of Planet's native plant life is inedible to human beings. The succulent fruit hanging on a native tree may be deadly poison, and eating it would be rather like devouring the output of a chemical plant. A few exotic fruit trees even bear "grenade fruit," which are stuffed with low-grade explosives. When triggered, such fruit can scatter their seeds widely. They may also act as a defense mechanism for their parent trees.

The bulk of Planet's biomass consists of green vegetation, earthlike aside from its unusual biochemistry. There are equivalents to algae, fungi, and small plants, the most complex of which can be compared to a palm tree. Over most of Planet, this vegetation takes the form of a savanna-like carpet of grasses and moss, with an occasional bush, vine, or small tree. Careful processing can remove the poisonous nitrates from native plant biomass, yielding a few proteins useful to humans.

Planet has a variety of native animal life. Most species are of at best modest intelligence, and none approach the near-sapience of Earth's chimpanzees, dolphins, or gorillas. The majority of species are neither hostile to humans nor particularly noteworthy. The *razorbeak* is a common birdlike animal, which lives in huge flocks in the vicinity of xenofungus zones. There are a variety of insect-like species, notably the *glow mites*, which rise in glittering swarms at dusk.

Xenofungus

The centerpiece of the symbiotic web is Planet's dominant species, a sessile, plant-like organism called *xenofungus*. Xenofungus takes the form of dense mats of tubular shoots, with individual specimens ranging from microscopic size to a foot in diameter. These mats form massive heaps covering thousands of square miles of land, with a depth ranging from 2 yards at the edges to almost 30 yards at the

However, xenofungus can also present a formidable obstacle. Moving across a fungal zone is a difficult process. It is possible simply to blast through the fungus with flamethrowers or other directed-energy weapons. A massive vehicle might have weight sufficient to break through the mats, like a tank crushing hedgerows on Earth. Lighter vehicles (or foot traffic) must move across the top of the mat. There, they will encounter rough points and sharp edges capable of shredding tires or environment suits. There are also many cavities and gaps in the mat, which can trap unwary travelers. In general, a fungal zone is equivalent to Very Bad terrain (p. B188), reducing travel rates to 20% of normal and often preventing wheeled transport altogether.

Deep in the thickest mats, the fungus sometimes takes on another form: the *fungal tower*. Instead of growing along the ground, a dense cluster of fungal stalks grows straight up, reaching heights of 75 to 100 yards. At the top of the tower are a variety of specialized organs with mysterious functions. Fungal towers are harmless if avoided, but any attempt to destroy them or the normal fungus in their area invariably triggers an attack by mind worms and other fungus symbionts (p. 16).

One mysterious property of the fungus is its "song." When approaching or traveling across fungal zones, some humans claim to hear a sort of hum or moan from the fungus. Others hear nothing at all, and all attempts at recording the sound have failed. Some claim that the sound is ethereally beautiful, while others claim that it can distract the human mind or even provoke madness.

There is also a form of xenofungus which lives in Planet's oceans. Sea fungus is more like kelp or sargassum weed, and is taller than but not as dense as land fungus. It has the same properties, however, providing potential resources but also hindering travel.

UNITY Supply Pods

The *Unity* carried dozens of *supply pods*: relatively small containers, each containing a vehicle or piece of equipment, designed to land independently on Planet's surface. The original settlement plan called for the pods to be launched only after a careful orbital survey. This would have allowed their placement in strategic locations, near the chosen site for the initial settlement. Unfortunately, the *Unity* disaster scattered them at random across the face of Planet.

Supply pods were designed for soft landings, and could even float if they landed in water. They varied considerably in size. The smallest were about 200 cubic feet in volume, and contained computers or automated manufacturing equipment. The largest were about 10,000 cubic feet in size, and were designed to land in the shallow water just offshore, carrying *Unity Foil* craft to the surface. Some pods carried robotic explorers, which would emerge after landing to survey the region or even to begin farming or mining operations.

As the colonists explored Planet in the early decades, they were always on the lookout for supply pods. Unfortunately, the pods often "irritated" the native life forms around their landing sites. Many an explorer discovered too late that the vicinity of a pod was infested with angry mind worms. In some cases, disturbing a pod triggered an outbreak of wild expansion on the part of nearby xenofungus (see main text).

The most striking feature of Planet's ecology is its web of symbiotic relationships. On Earth, it was common for two or three species to engage in some form of symbiosis. On Planet, the symbiotic network incorporates every native species. This worldwide network of cooperative relationships is extremely efficient; it produces little organic residue, as everything is used and reused. As a result, *fossils* are vanishingly rare on Planet, and fossil fuels are almost nonexistent despite conditions apparently favorable for their formation.

center of a fungus zone. The fungal mats can be thousands of years old, and are very stable in size and shape. Fungal mats cover perhaps a quarter of Planet's surface, and stretch across hundreds or thousands of miles to form a unified network.

The fungus concentrates certain trace elements from the soil in its shoots, and is rich in a variety of useful biochemicals. With the development of appropriate technologies, fungal mats can yield an abundance of energy, minerals, and nutrients.

Mind Worms

ST: 3 Move/Dodge: 2/6
DX: 13 PD/DR: 0/0
IQ: 3 Damage: 1d-4 cut
HT: 15/1-3 Reach: C
Size: < 1 Mass: 1 lb.

The most feared creature on Planet is a small, snakelike animal which rarely grows more than 6 inches in length. As individuals, mind worms are unimpressive, but en masse they are one of Planet's greatest scourges.

Several variant forms exist. Aquatic mind worms have Move 6, Dodge 4 while swimming. Flying mind worms have Move 18, Dodge 9 in flight. Both forms (or "vectors") are otherwise identical to the land-based mind worm.

Life Cycle

For most of its life cycle, the mind worm lives a solitary, almost dormant existence in the interstices of Planet's fungal mats. Its relationship with the fungus is symbiotic, with the worm performing several functions to keep the fungus healthy while feeding on selected fungal stalks. From time to time, however, mind worms congregate into a *larval mass* as the result of some biochemical trigger (or psionic signal) released by the xenofungus. As the larval mass grows, it can become a full-fledged *boil*, moving out of the fungus zones and into regions inhabited by humans. There, the mind worms become a terrifying plague, attacking any Earth-born thing they sense. Their physical attack is vicious but rather trivial, overshadowed by their capacity for psionic, assault.

Mind worms have razor-sharp mandibles that can inflict a vicious, grinding bite. Given time, they can gnaw through almost anything, although they can instinctively find weak points in armor and other materials. They have a particular affinity for the neural tissue of animals, and will seek out such tissue when attacking. Human victims face a horrific fate, as the mind worms burrow through the eye sockets or other openings in the skull.

Particularly dense mind-worm boils are capable of *covering* a human victim, bringing some of their number into position to burrow into his skull even if he is resisting. In most cases, however, the mind worm needs an unprotected and helpless victim before it can finish its attack. Mind-worm boils reduce their targets to such a state using a psionic attack (p. 16). Victims see nightmare visions of torture and suffering, and are effectively unable to resist as the mind worms move in for the kill. Only the most disciplined (or psi-talented) troops can hold off the mind-worm boil for long enough to bring flame guns or other weapons to bear.

An adult mind worm normally lives for only a month outside the symbiotic protection of its xenofungus field. Mind worms reproduce sexually, but they are hermaphroditic, and can even impregnate themselves in hostile conditions. Mind worms exhibit little genetic diversity; one worm is virtually identical to any other, anywhere on Planet.

When a mind-worm boil is destroyed by violence, its slayers reap an unexpected reward. Some members of a boil (possibly those which coordinate its psionic attack) build up rare elements and exotic organic compounds in their bodies. When these mind worms are killed, they leave behind husks that can be "mined" for useful materials. These husks were called *planet-pearls* by the human colonists, and were highly prized.

The average value of planetpearls is \$10,000 per hex of destroyed mind-worm boil. The most likely customer for planetpearls is a faction government or major corporate institution. Most buyers will pay half the estimated value of any planetpearls harvested by private individuals - hunting for planetpearls is a dangerous but possibly quite lucrative endeavor.



Fungal Blooms

Xenofungus occasionally enters a period of extremely rapid expansion, spreading across many square miles of territory in under an hour. The fungus spreads just under the soil, and then surges to the surface. This most often occurs in response to ecological damage, in which case it is always accompanied by a surge of mind worm activity. The fungus can also undergo wild growth in areas bombarded by xenofungus spores (p. 14).

The final stage of wild expansion, where the fungus breaks the surface of the soil and leaps upward, takes about 5 minutes. This can knock over people and vehicles, and can be extremely destructive to roads, buildings, and other immovable structures. To simulate this effect, assume that the expanding fungus has an effective ST of 50 per hex of land area. This ST cannot be used to throw things (the fungus doesn't grow *that* quickly), but it may be applied to shove or knock over movable objects (see p. B89). Immovable objects will take as much as 5d of damage per hex per minute (see p. VE166 for detailed rules on damage to buildings).

Anyone in an area of wild fungus growth will also suffer a psionic "attack." This is not a conscious assault on the part of the fungus, but a byproduct of the uncontrolled psionic energies released by the wild-growth episode. Treat the attack as a Mental Blow with Power 15 and skill of 14 t against everyone in the area of growth. The usual effects of a successful

Mind Worm Vectors

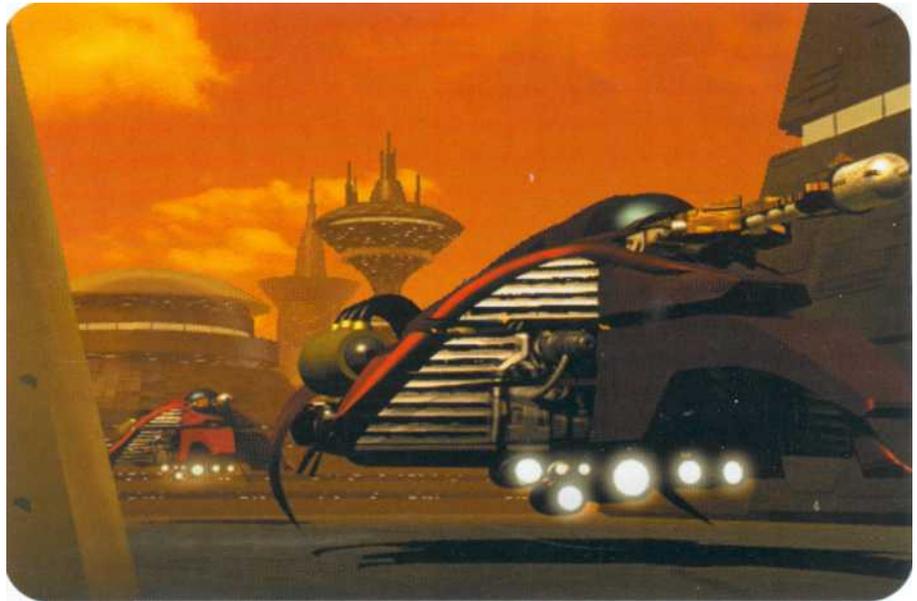
Mind worms are not restricted to land. An aquatic variety lives in Planet's oceans, symbiotic on the sea fungus just as the land-based variety lives within the continental fungus zones. Aquatic mind worms are the same species as the land-based variety, the variations in form and lifecycle apparently governed by a different subset of their common genetic basis. Aquatic boils are called *isles of the deep*. Members of the boil secrete a glue-like substance, allowing the isle to retain its cohesion as outlying members propel it through the water. The boil's biochemical processes generate gases for buoyancy, allowing the boil to float on the surface. There, the isle is quite capable of seeking out food sources such as ships and sea colonies. Isles of the deep that approach the coastline have been known to spawn boils of the land-based vector, which break away from the parent mass and proceed to hunt on land.

The third vector of the mind worm is the airborne *locusts of Chiron*. On rare occasions, a pre-boil mass of mind worms undergoes a radical physical transformation, its individual members growing wings and taking to the air. Locusts of Chiron are fast moving and particularly vicious, and normally appear only during periods of intense mind-worm activity.

Mind Worms in Combat

A mind-worm boil is considered a *horde*, as described in *GURPS Bestiary* (see p. BE42). The rules are similar to those for swarms of vermin (see p. B143). The horde is measured in *hexes*, according to the following table:

Boil Size	Hexes
Hatchling	8-15
Larval Mass	16-25
Pre-Boil	26-50
Boil	51-100
Mature Boil	101-300
Great Boil	301-500
Demon Boil	501 or more



Mind-worm boils move at 1 hex per turn on land or in water. A swarm of locusts of Chiron moves at 2 hexes per turn. If a human is surrounded or covered by the moving boil, then he takes 1d damage per turn. Most equipment and all other Earth-born life (grass, trees, etc.) are also subject to this damage.

As usual for swarms, normal clothing will protect for 2 turns, unsealed armor for 5. Sealed armor will protect for a number of turns equal to 1/5 the lowest armor DR on any hit location. Similarly, if a mind-worm boil covers a vehicle, the vehicle's **hull** will protect against attack for 5 turns if the body is unsealed, or number of turns equal to 1/5 the lowest armor DR on any vehicle location if sealed. After that, the mind worms will find their way inside.

A boil can be attacked just like any other swarm of vermin. Every 5 points of damage done to a boil will "disperse" one hex of the horde, either killing or driving off some of the individual mind worms that make up the boil. Concussion weapons (such as grenades) do *half* damage against mind-worm boils, while flamethrowers and flame guns (p. 96) do full damage. All other attack forms do damage as described on p. B143.

Mind Worm Psionics

Sometimes, a hex within a mind-worm boil will include a particularly mature and powerful individual who

can act as the coordinator for a telepathic gestalt incorporating all the worms in its hex. Assume that one-third of the hexes in a boil can form telepathic gestalts. These hexes tend to be some distance back from the leading edge of the boil, so damage to the boil will normally affect non-gestalt hexes first.

Each gestalt hex has Telepathy at Power 15 and Mental Blow skill at 14. It can use all of the techniques available to a human psionic adept: targeting a single victim, delivering an area-effect blast, battering down a Mind Shield, etc. This Mental Blow has the usual fatigue cost, which limits a gestalt hex to three unopposed psionic attacks - or one, if trying to blast through a Mind Shield. Once a hex's energy has been exhausted, that hex disperses exactly as if the defenders had damaged the horde. A small boil can easily run out of gestalt hexes with fatigue points to spend, leaving it only capable of physical attack. Gestalt hexes can coordinate their attacks, so if one group encounters a Mind Shield, it can call in a fresh gestalt hex to batter down the defense.

The targets of a boil's Mental Blow suffer the usual effects: they must make a HT roll or be mentally stunned, and they take 1d+1 fatigue damage. As well, they suffer an onslaught of nightmarish images, possibly triggering Fright Checks or other Will rolls to avoid self-destructive behavior (see p. 92).

Mind-worm boils also have the ability to interfere with the function of nearby electrical equipment. This is equivalent to the Dampen skill in *GURPS Psionics* (see p. P12). Each gestalt hex has Electrokinesis at Power 15 and Dampen skill at 12. A gestalt hex may roll against Dampen at any time. On a success, all electrical devices in the area of effect will *shut down*. This effect can be maintained continuously, but requires a skill roll each minute.

A gestalt hex can use Dampen to affect an area of 3 yards in radius, at a distance of up to 225 yards. It can produce this effect as many times as it wishes without fatigue cost. If a hex tries to Dampen multiple areas at once, or to launch a Mental Blow while maintaining Dampen, then the usual rules for multiple feats (p. B167) and repeated attempts (p. B166) still hold.

Monsters of Planet

The mind worms are the most terrifying of Planet's creatures, but there are other dangerous life forms which have similar symbiotic relationships with the xenofungus.

Sealurks

ST: 20-100 Move/Dodge: 16/8
 DX: 13 PD/DR: 0/0#
 IQ: 4 Damage: *
 HT: 15/40-200 Reach: C
 Size: 40-200 Mass: 1-8 tons

The monstrous *sealurk* lives in the deepest parts of Planet's oceans. How it survives at such depths is unknown, since there is very little food or dissolved oxygen available in its normal range. Its tie to the xenofungus is also unclear. Its relationship with humankind is similar to that of the mind worms, however.

A sealurk is a long, serpent-like creature. Its massive head is reinforced with bony armor to form a kind of natural ram. This gives its head PD 4, DR 30 (the rest of its body has PD 0, DR 0). It uses a telepathic attack similar to that of a mind-worm boil, attempting to paralyze its

victim in preparation for ramming. Once the victim's defenses are silenced and it is relatively motionless, the sealurk rams its way through any armor in order to reach the edible material inside. A sealurk is perfectly willing to emerge from the deep waters to attack ships, offshore bases, or coastal colonies.

An individual sealurk will have Telepathy at Power 14 to 20, depending on its age and experience. Its Mental Blow skill is 14. When it attacks humans, it will almost always make repeated Mental Blows using the area-effect technique (see p. 92). When attacking physically, a sealurk will try to ram at full speed, inflicting dice of crushing damage equal to 1/6 its original hit points. The sealurk also *takes* this amount of damage, or the amount of damage that it took to ram through the obstacle, whichever is less. This is damage to the sealurk's head; its natural armor protects normally. If the sealurk is able to close to bite, use the table on p. B140 to determine biting damage.

A sealurk will withdraw from combat if its victims' defense has not collapsed by the time it has spent 1/4 of its fatigue points on psionic attacks. It will also withdraw if it can find no way to batter through the armor of its prey. Otherwise, it will attack until it can sink a ship or wreck base facilities, picking off as much edible prey as it can.

Spore Launchers

ST: 60-80 Move/Dodge: 1/5
 DX: 14 PD/DR: 0/0
 IQ: 4 Damage: *
 HT: 14/24-30 Reach: *
 Size: 6-8 hexes Mass: 1-1.5 tons

One of the more bizarre life forms on Planet is the *spore launcher*: a nearly sessile creature, more plant than animal, which lives in symbiosis with land-based xenofungus.

An individual spore launcher is a semi-rigid, tube-like organism about 8 yards long. One end is open, and includes a cluster of sensory organs. The other end is closed, rooted in a complex knot of tissues and organs that forms the main body of the creature.

Spore launchers live in commensal colonies, with several launchers clinging to one another at their main bodies and extending their sensory clusters in various directions. The smallest spore-launcher colonies ever observed had 5-6 members, while the largest had 60.

At close quarters, spore launchers are nearly helpless; they are physically powerful, but too slow to make any kind of attack. At range, however, spore launchers can attack by firing xenofungus spores at an intruder. These spores are solid projectiles of dense organic material, about two inches in diameter and six inches long, massing about 2 lbs. Treat this as a ranged attack at skill 14, doing 8d crushing damage, with SS 25, Acc 15, 1/2D 3,500, and Max 8,200. Any given spore launcher can fire one spore every 3 seconds, and will have 2d spores when encountered. New spores are grown at a rate of about one per day, but only if the spore launcher is in a xenofungus area.

As well, each spore launcher has Telepathy at Power 10 and Mental Blow at skill 14. Their Mental Blow has the same special effects as that of mind worms. Spore launchers normally use their telepathic attack only in self-defense, or after they have depleted their supply of spores.

Spore launchers are a danger not only to individual colonists, but to the colonial infrastructure. When directed by the xenofungus, they can launch spores in a high arc. At the top of the arc, the spores change shape and glide for long distances, coming down gently in territory that has been developed by human terraformers. Such spore-falls have been observed at distances of up to 50 miles from the originating spore-launcher colony. Spores that arrive this way do no direct damage. Instead, they burrow into the ground, triggering an outburst of fungal growth in 1d days. The fungal mats thus created are no more than a few dozen yards across, but their initial appearance involves an episode of wild expansion (p. 15), which can be hard on humans and their constructions.

Taming Monsters

One of the turning points in Planet's history came when some of the human colonists discovered how to *capture* mind-worm boils, preventing their attacks or even turning their elemental violence toward human goals. Initially, this was accomplished only by accident. However, as the colonists learned to use telepathic power deliberately, they also learned reliable techniques for mind-worm capture.

To attempt to capture "wild" mind worms, a boil must be located and approached while it is not already attacking humans or human infrastructure. An individual telepath must come within his Telepathy range of the boil's leading hexes (if his Power is low, this may expose him to the boil's physical attack!). He must then open telepathic communication with the boil, making a *Telereceive* roll and a *Telesend* roll. If the telepath does not have the *Mind Worm Sympathy* advantage (see p. 88), then both rolls are at -4.

At the GM's discretion, an *untrained* telepath may attempt the *Telesend* and *Telereceive* rolls, rolling against IQ-6 for each. History records that the earliest mind-worm captures were made by people who didn't even realize that telepathy was *possible*. It also records that such captures were made at incredible personal risk to the untrained telepaths involved . . .

Once telepathic contact is established, the GM should make a reaction roll for the boil. None of the telepath's normal reaction modifiers will apply, not even Charisma, but his *Strong* or *Weak Will* (if any) *will* modify the roll. This reaction roll is also modified by the history of the telepath's *faction* with respect to native life. If the faction has no history of "green" policies or respect for the native ecology, then the reaction roll will be at -6 *or worse*. A faction which takes extraordinary pains to integrate its activities into the native environment and avoid ecological damage may receive up to a +6 modifier. The GM may use his own judgment to determine these modifiers, or he may use the *Social Factors* system (see p. 125). The reaction roll will be at a further -4 if the mind worms are currently responding to ecological damage, whether caused by the telepath's faction or not.

On a *Neutral* reaction, the boil will ignore the telepath, but will press any attack it may be mounting against other humans in the area. On a *Good* or better reaction, the telepath will "convince" the boil to break off its attack and enter into a permanent rapport. From this point on, the boil will act as the telepath's loyal friend, remaining nearby and obeying his instructions.



forced to maintain extensive genetic research facilities in order to contain the disease in their territory.

Prometheus Virus

"Prometheus virus" was the most devastating of the Planet-born diseases that struck at humans themselves. Attacking the human brain and nervous system, it left few survivors and crippled most of those. Entire factions were sometimes devastated by an outbreak of the disease.

Prometheus virus is transmitted by physical contact (make a HT roll to avoid contracting the disease when exposed). It has a long incubation period; from 24 hours to one week after exposure, a sufferer is contagious but will show no symptoms except under detailed medical examination. After the incubation period is over, the victim will lose 1 point of DX and IQ per day until cured. He must make a daily HT roll as well, at -6 if not under professional medical care at TL9 or above. Failure means he loses 1 HT; success allows him to regain 1 HT.

If the victim's DX, IQ, or HT ever reaches 0, then he dies. On the other hand, if the daily HT roll is ever a natural 3 or 4, or if the sufferer makes three successful HT rolls in a row, then he is cured, and lost HT will start to heal at the usual rate. Once the victim is at full HT, he regains half (rounded up) of any lost DX and IQ. The other half is lost *permanently*.

Planetary Microbes

Before Planetfall, the *Unity* expedition assumed that diseases native to Planet would be unable to affect humans or other Terran life. This was a serious miscalculation. Some microbes that were completely harmless to Planet's native life were deadly to Earth-born life.

Planet Blight

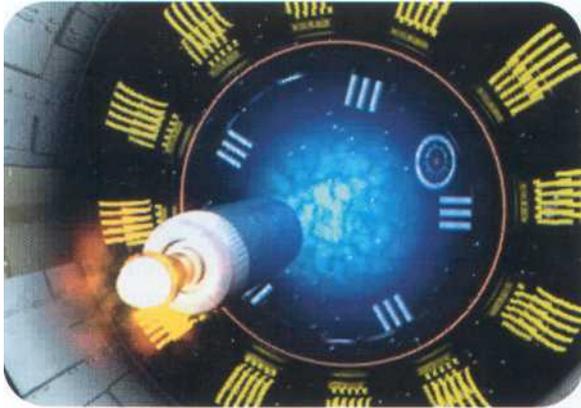
One such organism gave rise to the complex of related diseases known as Planet Blight. Animal life was

unaffected by the Blight, but Terran-born plant life was extremely susceptible. The disease worked by interfering with chlorophyll photosynthesis. Crop plants or trees that caught the virus slowly sickened, their leaves turning a yellow-brown color. Infected plants almost always died within a few days of exposure. Once the virus appeared in an area, agriculture and forestry for hundreds of miles in all directions was in immediate peril.

Planet Blight was quite rare. However, when it did appear, it invariably turned out to have mutated since the last outbreak. Bases were

The Progenitors

Soon after the human settlers arrived on Planet, they discovered that *someone* had been there before. They found strange artifacts, mysterious works of engineering, and evidence of genetic tampering in the native life. Before long, the colonists were referring to the *Progenitors*, a race of enigmatic aliens who had put their mark on Planet long before.



A few years after Planetfall, the colonists learned the truth. For a few hours, the skies over Planet were filled with pyrotechnics as a great battle was fought in deep space. A few weeks later, there were rumors of strange, bulky aliens moving about on Planet's surface, building bases and facilities of their own. Sometimes, these newcomers ignored humans. At other times, they reacted violently to human presence. One thing was clear, however: there were at least two hostile factions among the aliens, and they fought viciously whenever they met. It became clear that the human colonists were caught in an alien crossfire.

History

It took decades, even centuries for humanity to piece together the story of the Progenitors. What follows is an assemblage of the best guesses made by humans who spent their lives studying the aliens.

The Manifold War

The Progenitor civilization is vast, extending across much of the galaxy. It is also very old, stretching back at least 10 million years (and possibly much further than that). Long ago, the Progenitors attained a level of technological mastery that could only be considered godlike. They controlled time and space, studied the destiny of the entire universe, and rebuilt entire worlds in the course of complex scientific experiments.

Captured Monsters

A captured boil's loyalty is not absolute. If the telepath or his allies harm the mind worms, then the bond will be broken and the boil will resume its attack. The telepath will also need to remain within his **Telepathy range of the boil, which may cause complications** if the mind worms are "reluctant" to peacefully enter a **colony** base or other human-inhabited region.

A telepath who is bonded with a mind-worm boil can dismiss it, either returning it to its wild state or causing it to disperse entirely. A telepath may be bonded with only one mind-worm boil at a time, although the boil may grow as more **worms** join it or as its members breed. Captured mind worms tend to grow larger and more powerful as they gain experience working with their human broodmasters.

While a telepath is bonded to a mind-worm boil, its thoughts will "leak" back across the interface into his mind. This leakage is usually controllable, but in stress situations, the GM may require the telepath to make a Will roll to avoid becoming submerged in the boil's thought patterns. On a failure, the telepath may experience difficulty with speech or rational thought, wild mood swings, or violent impulses. Such episodes normally last only a few seconds at a time.

mind-worm boil which has already bonded with a telepath is no longer "wild" and cannot be captured

using this procedure. Naturally, the telepath may himself be attacked using telepathic or physical means. If he is killed or loses control of the mind worms, they disperse without attacking anyone.

At early **TL9**, mind worms can be bred and kept healthy in captivity. Any telepath may attempt to bond with a mind-worm boil that has been bred in captivity, with no penalties to the reaction roll. Even factions that hold the native ecology in contempt can breed captive mind worms, although the boils thus created tend to be small and puny.

Several of Planet's other life forms can be captured telepathically, notably isles of the deep and spore-launcher colonies. In theory, a telepath could capture wild locusts of Chiron or a wild sealurk, but in practice this is almost impossible. Locusts only appear in the wild in response to ecological damage, and will not be in a "mood" to listen to telepathic pleas. Sealurks are simply too rare to consider capturing, and only approach the surface in the course of attacking a human ship or base. Both locusts and sealurks can be bred in captivity after the development of the appropriate technologies, and can be bound by telepathic adepts under such circumstances.

Sadly, the Progenitors could not maintain their civilization at its height. For millions of years, they stagnated, undergoing no significant cultural or technological change. Then their society was torn apart by civil war. The cause of the war was unclear to human observers, but the central issue of contention seems to have been what the Progenitors should *do* with their vast technology and resources.

of the struggle, leaving both sides sadly diminished from their days of glory.

Arrival

Worst of all, the war may still be going on. The battle fought above Planet just after Planetfall appears to have been a single skirmish between two scout ships. Each ship had come to the Alpha Centauri system to lay claim to Planet, which was either built

- a civilization quite different from the one it had left behind in space.

The Progenitor factions were bitter enemies. Not once in Planet's history did they negotiate, or even meet peacefully face to face. They occasionally dealt with humans, but any human faction that agreed to an alliance with one alien faction inevitably earned the enmity of the other. The Progenitors were quite willing to commit atrocities against each other or against human factions; in time, the humans came to use similar tactics against the aliens. With the Progenitors in the picture, the conflict over ideology became a brutal struggle for species survival. Neither race could claim mastery over Planet without completely eradicating the other.

What is a Manifold?

The Progenitor concept translated into English as "manifold" is actually quite complex, tied into the aliens' conception of the universe.

To the Progenitors, the entire universe is a manifold, a single entity which presents itself to the sentient observer in an infinity of diverse manifestations. From quasars to quanta, the aliens believe that each layer of the universe's structure has its own unique properties, even its own kind of self-awareness.

The Progenitors claim that the multi-layered structure of the universe is a clue to the nature of reality itself. At the smallest scales of existence, one finds gateways into other worlds of experience, in a sense other universes. In this context, the English phrase "worlds within worlds" appears to translate precisely into Progenitor language. Thus, the Progenitors use "manifold" to mean not only this universe, but also the complex of *all possible* universes.

Confusingly, the Progenitors *also* use "manifold" to refer specifically to Planet. Indeed, the aliens refer to Planet as "the Sixth Manifold," and speak of five other Manifolds with specific locations elsewhere in the galaxy. In this context, the Progenitors may be referring to Planet as a vast artificial apparatus, an experiment in cosmic intelligence. The connotations of the term seem to indicate that the aliens regard Planet as central to the destiny of the other "manifolds" (i.e., the universe or multiverse as a whole).

Relics

When the human colonists arrived on Planet, they found many relics of Progenitor civilization already present. These played an important role in the course of colonial history.

Alien Artifacts

Small alien artifacts were fairly common - there were several hundred "finds" in the course of colonial history. These appeared in bewildering variety: pieces of broken machinery, objects of representational or abstract art, inscriptions, even misshapen lumps of matter with no obvious purpose. Most highly prized were the "library nodes" that were often found in the vicinity of other artifacts.

Library nodes were conical devices, perhaps a foot from base to tip and roughly 40 lbs. in mass. These appear to have been the most common data-storage devices in use at the time of the Progenitors' previous visits to Planet. Once the colonists learned to read the nodes, they found that each contained many terabytes of data regarding Progenitor activities, most of it bewildering and impossible to interpret. However, in some cases there were legible diagrams and schematics for specific items of Progenitor technology. Such artifacts often led to breakthroughs in human technological research, or were used to help develop complex projects and technological prototypes.

The majority faction, dubbed the *Manifold Caretakers* by human xenologists, wished to conserve their society's condition, continuing to live indefinitely without further advance. The rebel faction, the *Manifold Usurpers*, wished to make the daring leap to true godhood. The Usurpers believed that they were on the verge of being able to transcend space-time itself. They insisted on pursuing this transformation, even if it meant the wholesale looting of their civilization's vast resources.

The war lasted for centuries. It was devastating, wrecking dozens of worlds and costing the lives of trillions of sentient beings. The Progenitors lost much of their old wisdom and technology in the course

or massively re-engineered by the Progenitors in the distant past. The battle was inconclusive and both Starships were destroyed, but each ship managed to launch escape pods. This left several hundred aliens from each faction stranded on Planet's surface, cut off from the rest of their civilization but grimly determined to see the war through to its conclusion.

Once the Progenitors had landed on Planet, they took up an existence much like that of the human colonists. Each alien faction was committed to a specific ideology. Each had lost almost all of its original technical base, and had to laboriously rediscover those technologies in order to pursue its goals. Each was forced to build a new civilization on Planet's surface

Using the Progenitors

In games where the Progenitors appear, they should be played as enigmatic, powerful, and dangerous. Their language and thought processes differ radically from the human norm. Even in their "fallen" state, they are technically more advanced than the human colonists. Their goals take no notice of human presence, and they are entirely willing to obliterate human populations if need be.

On the other hand, the aliens need not appear in the flesh. GMs who dislike the "canonical" Progenitors can assume that they never arrive on Planet, leaving the human colonists to develop on their own. In such games, the "resonance" and "manifold" sciences unique to the aliens can be discovered through study of Progenitor artifacts. (Even games in which the

Progenitors do not appear personally should include alien artifacts. Those are too integral to the *Alpha Centauri* setting to be omitted.)

Particularly brave GMs may choose to create their own alien species to act as the Progenitors. Perhaps the Progenitor civilization included more than one species in the first place - or perhaps the *real* Progenitors are long since extinct, and the aliens arriving on Planet are latecomers fighting over the remains of the Progenitor civilization.

In short, the alien presence on Planet is a "plot hook" with which the GM can exercise some creativity. Any aliens that appear on Planet should probably be strange and powerful, but the GM is free to determine their nature, psychology, and goals for himself.

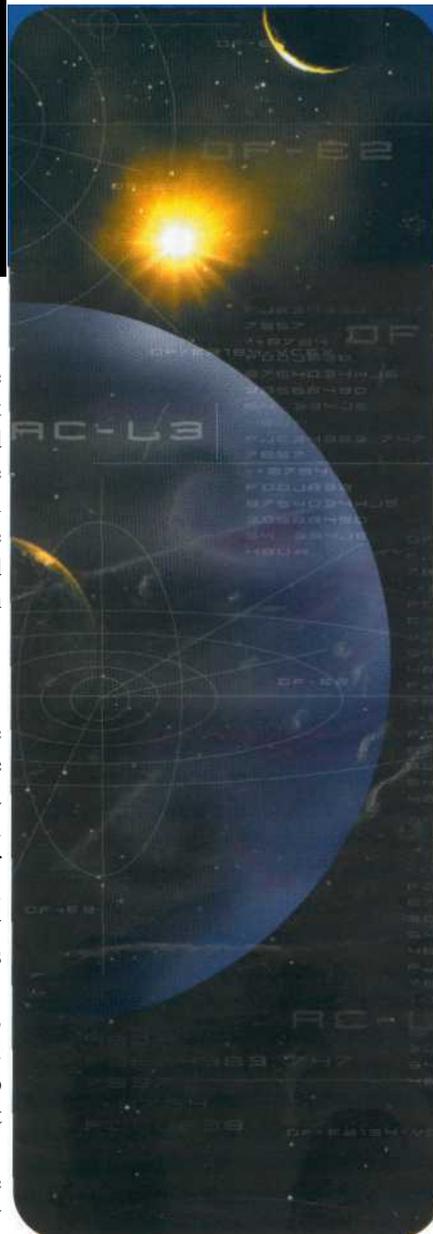
Battle Ogres

The rarest and most prized relics were the Battle Ogres. These were great armored combat "walkers" that used power sources and weaponry far more advanced than anything the human colonists were familiar with. The discovery of a single Battle Ogre could give a faction a critical advantage in early disputes.

Monoliths

Here and there about Planet, the colonists found *monoliths* standing alone in the wilderness. Each monolith was a four-sided obelisk, just under 40 feet in height, surrounded by a low circular wall with a single gap for easy access. Wall and obelisk were both apparently made of stone and covered with carvings in the Progenitor language. Surprisingly, these "stone" artifacts were millions of years old, and had somehow avoided damage due to weathering or earthquake during that time.

At first, the colonists assumed that the monoliths were simple markers. They soon found that people and machinery which lingered in the vicinity of a monolith were somehow *improved*. Damaged machinery was repaired. Undamaged machinery began to work with greater efficiency or effect. Even human beings who



spent a few days within a monolith's wall found themselves stronger, healthier, and thinking more clearly and with greater force of will. After centuries of study, the colonists

discovered that the mechanism for these effects was a local manipulation of probability fields. Visitors were benefiting from a kind of "retroactive luck" that could improve their situation in a variety of ways.

In game terms, anyone who spends at least 2 local days within a monolith's wall should roll 3d, with the following effects:

On an 11 or higher, he is cured of all injury and disease. His personal equipment will be fully repaired, and any power cells in that equipment will be completely charged. If he is driving a ground vehicle, then it, too, will be completely repaired. Anyone may gain this benefit any number of times, from the same monolith or from different ones.

On a 15 or higher, he may also immediately spend any unspent character points to buy higher attribute scores or skills - or even to buy off physical or mental disadvantages, or to purchase new advantages. Any such purchases are still subject to GM approval, but the GM should be lenient with purchases that would not normally make sense in the context of the game (this *is* a miracle, after all). No one may gain this level of benefit more than once, even if he visits different monoliths.

The Planetmind

One of the human colonists' most shocking discoveries was that Planet was, in a sense, intelligent and self-aware.



Many had suspected this fact long before scientific research proved it. Even before Planetfall, some mystically inclined colonists intuited that Planet as a whole should be considered a single living organism. After the settlement, many people reported a sense of presence out in the wilderness, especially near mats of **fungus**. Some of the more sensitive (or imaginative) colonists experienced disturbing dreams, religious visions, and more drastic alterations of consciousness. Psych specialists assumed that these episodes were the result of extreme stress, but they continued and even intensified as the years passed.

Eventually, the truth became clear through two different means. The theory was developed into a

conscious discipline, telepathic adepts were able to trace the stray currents of alien thought back to their source. Meanwhile, scientists using advanced techniques to study the xenofungus discovered that the world-girdling fungal mats were extensive multistate neural networks. Ripples of bioelectric energy passed from stalk to stalk through the mats, forming vast patterns centered on the fungal towers.

As it turned out, the fungal mats were effectively a Planet-wide "brain" in which thoughts slowly moved around the globe. Studies showed that the so-called Planetmind was potentially capable of incredible power and intelligence. Yet it seemed dormant, unable to communicate clearly or act consciously. It appeared that the fungal mats had so far failed to cross the crucial threshold of complexity required to awaken into full consciousness. The Planetmind was a sleeping god, trapped in an eons-long dream.

Further study showed that the fungus was slowly but inexorably moving toward an awakening. More disturbing, there was evidence that the Planetmind *had* awakened from time to time in the past. Every few million years, the fungal mats reached the needed state of maturity, granting the Planetmind a state of godlike self-awareness for a brief moment. Unfortunately, these episodes of consciousness were unstable, and in their aftermath much of the other life on Planet was invariably wiped out. Scientists and mystics alike speculated on what would happen if such an event took place while humanity still lived on Planet. . .

The fact that Planet was a half-conscious mind explained many things, from the psychic disturbances many colonists experienced to the seemingly directed attacks by the mind worms. Human beings had to think of their world as a potential person, which might one day become aware of them, and which was not necessarily going to be friendly.

Talking to Planet

In the *Alpha Centauri* computer game, the Planetmind is portrayed as a constant presence. Its unconscious thoughts influence the minds of many colonists. Mystics are confronted by an overpowering sense of Planet's awareness, and come to view Planet as a kind of god or demon. Faction leaders hear a "Voice" which plagues their half-awake moments with disturbing pronouncements. Toward the end of the game, the Planetmind awakens and becomes a conscious partner in events.

GMs can easily include the Planetmind as an important NPC in their games. In most cases, it should be portrayed as elusive and enigmatic, hard to distinguish from the products of a character's own subconscious mind. Indeed, everyone may perceive the Planetmind differently, filtering the experience through his own thoughts and imagination. Disagreements over what Planet "really wants" will drive much conflict between individuals and between factions.

If the Planetmind finds a way to speak directly to an individual, then the contact will be confusing, not unlike trying to pick a single voice out of a babbling crowd. The Planetmind will almost always refer to itself as "we," becoming "I" only after the construction of the Voice of Planet (p. 81). It will be curious about human ideas and experience, and will try out these new concepts in an almost playful manner. For example, in the computer game, the Planetmind experiments with poetry (and is initially quite terrible at it!).

3. Factions

The colonists stranded on Planet were split into several *factions*. Each faction was centered around a single charismatic leader, and devoted to a specific ideology. Below are descriptions of the 14 factions that appear in the *Alpha Centauri* computer game. The accompanying character sheets for the faction leaders describe the leaders as they were aboard the *Unity* or shortly after Planetfall.

The Lord's Believers

Out of the very Apocalypse our people fled, to this new world among the stars. If any among you fear that God has forgotten us, do not be deceived. How could we have survived at all, unless the Lord had kept us in the palm of His hand? Surely we are here because we are destined to obey His will and fulfill His purpose. - Sister Miriam Godwinson, "But For the Grace of God"

In the final hours aboard the *Unity*, the ship's Psych Chaplain found herself stranded in a wrecked portion of the ship, wounded and far from the rest of the command crew. At almost the last minute, she managed to cross the exterior of the hull and reach one of the escape pods. The pod was as badly damaged as the Psych Chaplain herself. Hundreds of crew were trapped inside, many of them injured or suffering from radiation poisoning. Even so, when the pod was released, it reached Planet's surface safely.

Miriam Godwinson proved an effective leader. Her survivors were the poorest of the stranded colonists, lacking even basic survival necessities. Despite this disadvantage, Godwinson's thorough understanding of human psychology, combined with her profound religious faith, enabled her to keep her "flock" alive and motivated. Within a few years, all of her people had converted to her particular brand of Christianity. They were no longer the dregs of dead

Earth. They were the Lord's Believers.

Beliefs

The Believers have a communal vision of an all-powerful and relentless God. In their view, God has a purpose for humanity on Planet, and demands their obedience in fulfilling that purpose.

The Believer ideology is based on two principles: *worship* and *dissent*. Believers feel that they are called to build the Kingdom of God within the physical universe. Their goal is a world in which all humans are in tune with God's will, spending their lives in such a way that every activity is a form of worship. The Believers also know that they are God's warriors. They are called on to persuade others through dissent, pointing out the error in godless, spiritually dead ideologies. When persuasion fails and such ideologies threaten the Kingdom of God, the Believers are required to fight in its defense.

Relations With Other Factions

Godwinson and her Believers are the faction most strongly committed to a theocratic state. They hold both democracy and atheistic forms of totalitarianism in disdain. As a result, they are not likely to establish close ties with any other faction, and they are extremely aggressive toward their neighbors. The only way to maintain an alliance with the Believers is to be so strong militarily as to deter any attack (and even this isn't certain).

The Believers are particularly hostile toward the University, which they regard as a haven for atheistic and immoral research. As Planet's history moves on and the University produces a stream of technological marvels, the Lord's Believers become ever more vehement in their "dissent." The Believers also despise the Consciousness, calling the "cyborgs" inhuman monsters that have discarded their immortal souls.

Sister Miriam Godwinson 130 points

Human female; age 46; 5'6", 121 lbs.; pale skin, red hair cut short, green eyes. **ST** 10 [0]; **DX** 11 [10]; **IQ** 13 [30]; **HT** 12 [20].
Speed 5.75; Move 5.

Dodge 5. **Advantages:** Charisma +3 [15]; Military Rank 4 (Lt.

Commander) [20]; Strong **Will** +2 [8]; Voice [10].

Disadvantages: Fanaticism (Conclave Christianity) [-15];

Intolerance (Religious) [-10]; Sense of Duty (Those needing spiritual guidance) [-10]; Unattractive [-5]. **Quirks:** Enjoys debating "nonbelievers" on points of philosophy; Quotes religious aphorisms; Rigorous ascetic. [-3] **Skills:** Administration-13 [2]; Bard-20 [6]*t; Computer

Operation-13 [1]; Diagnosis-12 [2]; Diplomacy-15 [4]*; Free Fall-11 [2]; History-12 [2]; Leadership-18 [6]f; Literature-12 [2]; Performance/Ritual (Conclave Christianity)-14 [4]; Physician-11 [1]; Psychology-14 [6]; Savoir-Faire-16 [2]*; Swimming-11 [1]; Teaching-14 [4]; Theology (Conclave Christianity)-14/20 [8]; Vacc Suit-12 [1]; Writing-13 [2].

Languages: Arabic-12 [1]; Classical Latin-11 [1/2]; English (native)-13 [0]; Hebrew-12 [1]; New Testament Greek-11 [1/2]; Spanish-12 [1].

* Includes +2 for Voice.

f Includes +3 for Charisma.

Miriam Godwinson was born in Georgia, in the Christian States of America. Her father was a high-ranking minister in the Evangelical Fire, one of the apocalyptic sects that appeared in the American Christian community after the turn of the century. She attended a series of religious schools, culminating in a degree in theology from the College of the Covenant and a doctorate in psychology from Yale University.

By the time Godwinson began her own ministry, the Evangelical Fire was the largest Christian denomination in the once-United States. By the age of 26, she was the ranking Psych Priest of the Heavenly Diocese, third most senior member of the sect. In 2040, she volunteered to serve with U.N. "reintegration forces" sent to the Middle East after the Crusader Wars. She proved to be a talented military psychologist, but at the same time, her religious ministry to the desperate people of the region backfired. Millions hailed her as a kind of messiah, forcing the U.N. to release her from service before her presence could further inflame local religious mania.

The U.N. authorities planning the *Unity* mission were reluctant to have such a controversial figure on board, but political pressure from the American governments forced them to consider her for the position of Psych Chaplain. Her undeniable talent for that role eventually won her the appointment. She devoted herself to work aboard the starship, regarding it as her opportunity to take the word of God to the stars.

Godwinson is a strongly empathetic and charismatic individual, a natural leader who can demand the attention of others. Her sole focus is on bringing hope and spiritual guidance to those who most need it, and her considerable talent as a psychologist and public speaker make her very effective in this role. Her personal spiritual vision is apocalyptic, centered on the image of an all-powerful and relentless God who will sweep aside all opposition. Beneath her smooth and sympathetic aspect, she is bitterly intolerant of any ideology but her own.



Strengths

The greatest strength of the Believers is their fanaticism. Devotion to their religious beliefs makes them almost impervious to outside persuasion. Believers can be conquered by force, but they are nearly impossible to subvert.

Believers are also exceptionally effective in combat, at least when they are on the offensive. Their religious fervor gives them great ferocity when they are pressing the attack against the "godless" members of other factions. When they are defending their own, however, they are no more effective in battle than any other faction.

Weaknesses

Believer ideology is based on divine revelation rather than empirical investigation, so ambitious Believers tend to enter the pulpit rather than the laboratory. Further, the Believers tend to mistrust "secular" science as being contrary to God's will for mankind. In all, they are fairly good at adapting technological innovations developed by others, but their dislike of the scientific

Believer Characters

1

Technically, the Lord's Believers are the colonial offshoot of a sect called Conclave Christianity. All members of the faction receive basic instruction in the principles of this sect, which amounts to at least half a point in Theology, with the optional specialty "Conclave Christianity." Particularly

They are quite effective at this task. Believers are usually able to cope with all manner of misfortunes, calmly certain that God's plan marches on regardless. Believers do not blindly obey their leaders - a fact which surprises members of other factions. The basics of religious doctrine are enforced, but there are often disagreements on how best to obey that doctrine. Ministers are trained in ways to deal with such disputes without imposing a rigid position on others.

Believers normally wear simple clothing and carry severely functional equipment. Almost every Believer carries a personal religious symbol, usually a small metal cross worn around the neck.

method makes it difficult for them to develop new technology of their own.

Although the Believers are interested in exploring Planet, they have some difficulty integrating their own activities into the natural ecosystem around them. Believer ideology claims that Planet is a "promised land," a gift from God to be used as they see fit.

of wasting time on external comfort or beauty, the Believer focuses on his inner spiritual life.

Believer society is led by its ministers, who provide spiritual and psychological guidance to their people.

Lifestyle

The first Believer settlement on Planet was called New Jerusalem, and that name evokes much of the Believer way of life. It is an austere way, lacking creature comforts and luxuries. Believer art is reserved for the faction's great cathedrals, which are among the grandest and most beautiful buildings on Planet. Instead

Adventure Seed: Gideon's Troop

A Believer leader plans to conquer a nearby outpost belonging to another faction. Promising glory in God's service, he gathers a force of volunteers, including the PCs. Then he begins to weed volunteers out of the force by any available means. Soon it becomes obvious that the leader intends to demonstrate the power of God by conquering the outpost with what appears to be completely inadequate force. Winning approval by managing to remain with the attack force is one thing; surviving the attack will be quite another.

The Cybernetic Consciousness

The question I pose to you is simple. Who is to be the master, you or the bits of talented meat that secrete hormones for you? Your glands are the product of aeons of evolution, and they are not to be scorned, but neither are they to be obeyed blindly.

- Aki Zeta-Five, "The New Awareness"

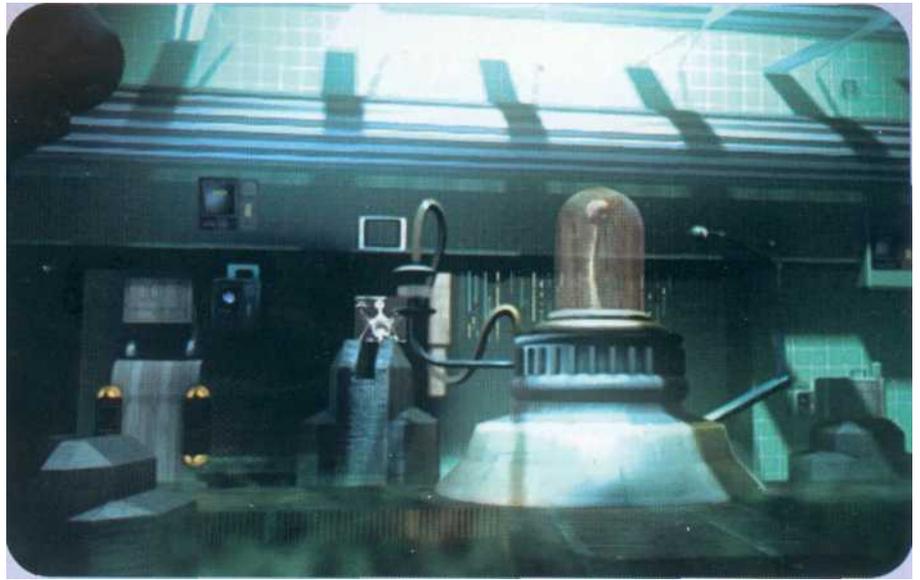
After Planetfall, a young computer scientist was discovered to have somehow become symbiotic with a sophisticated computer implant (see text box, p. 27). The melded entity, which called itself "Aki Zeta-Five," began its existence among Zakharov's University faction (see p. 48). However, it soon developed

irreconcilable differences with Zakharov's leadership. Respecting the older scientist's genius, it came to understand the weaknesses in his devotion to pure logic, the prejudices and ego that limited his vision; therefore, it gathered a number of sympathetic followers and struck out for a distant part of Planet.

Soon, the colonists were hearing from a new faction: the Cybernetic Consciousness. The "Cyborgs" were fanatic devotees of pure logic, idealizing the perfect clarity of machine minds. Early on, they simply practiced elaborate discipline to excise emotional awareness and increase their reasoning ability. Later, many units of the Consciousness were leaders in the field of mind-machine interface. They used bionic replacement parts and even computerized implants, becoming perfect fusions of biological and machine intelligence.

Beliefs

The Consciousness believes that superior intelligence requires a mastery or rejection of emotion. They believe that only the full use of human intelligence, boosted by cooperation with machines, will be enough to ensure human survival on Planet. Their ideal of perfect rationality requires that hatred, greed, and the lust for power be excised (along with love, compassion, and joy). Even in the earliest days, before any of Aki Zeta-Five's followers can emulate her union with a machine, they practice the control of emotion through careful, logical analysis.



Consciousness Characters

Committed members of the Consciousness strive to give up their normal emotional awareness. They are likely to have disadvantages such as Callous, Low Empathy, No Sense of Humor, or (in extreme cases) Clueless.

As the name suggests, the Cyborgs are enthusiastic about bionic implants. Almost all faction members will invest in the Interface Jack advantage as soon as possible. As well, GMs with access to *GURPS Cyberpunk*, *Ultra-Tech*, or *Ultra-Tech 2* may wish to permit Cyborg characters to select freely from the implants described there.

technology becomes available. They are also skilled at analyzing and assimilating technology developed by others.

Weaknesses

Even the most dedicated "cyborgs" find it difficult to discard all emotional awareness. Members of the Consciousness are often troubled by (sternly repressed) emotional turmoil. At times, their logic can fail and they will behave unpredictably. They often have difficulty maintaining healthy personal relationships among themselves.

The fact that the Consciousness has rejected all emotions, including the "positive" ones such as love or compassion, makes its members seem aloof and slightly inhuman to members of the other factions. From their earliest days on Planet, others call members of the Consciousness "cyborgs," implying that they are more machine than human.

Relations With Other Factions

Aki Zeta-Five is ruthlessly pragmatic, willing to make or break alliances with every shift in inter-factional politics. Her closest ties are usually with the University, with whom the Consciousness shares many goals and ethical values. Like the University, the Consciousness is bitterly opposed to theocratic factions such as the Lord's Believers and the Planet Cult.

them to cooperate efficiently without much thought for individual pride or ambition.

The Consciousness and its members are devoted to the quest for knowledge. They are superb researchers, tireless and undistracted by emotional concerns. They work well with computers and other machines, and embrace direct interface between their own minds and machine intelligence as soon as that

Strengths

Members of the Consciousness are trained to use cool, clear logic as the basis for all decisions. This does not prevent disputes, but it does permit

Adventure Seed: Deep Cover

Intelligence has revealed that the Cyborgs have made a breakthrough in computer technology, something that may revolutionize several industries and have drastic military consequences. The party is sent to infiltrate a Consciousness base, posing as Cyborgs themselves. Can they carry out the deception long enough to recover the secret and escape?

Lifestyle

The Consciousness offers a paradoxical lifestyle to its "units." On one hand, it makes no concessions to human sentiment or artistic expression, considering those things part of the animal heritage it hopes to expunge. On the other hand, it recognizes that its units are most effective when they are well fed, have comfortable shelter, and have plenty of opportunity for social interaction. Consciousness cities are stark places, unsoftened by art or beauty, but they do offer a rich social and intellectual life.

Consciousness society is an absolute meritocracy. Whoever has the most relevant expertise is deferred to in any given situation. Aki Zeta-Five is the "Prime Function" of the Consciousness simply because she is more dispassionately intelligent than any other member. Her authority has nothing to do with personal charisma or political legitimacy, and indeed if another unit displayed greater intelligence she would step down without a qualm.

One quirk of Cyborg society is its difficulty with romantic relationships. The Consciousness is deeply ambivalent toward love and sexual passion. It recognizes that these emotions have a role in propagating the species, but it regards them as insidiously dangerous to the ideal of perfect emotional detachment. The Consciousness recognizes no institution of marriage, and indeed discourages men and women from forming lasting pair bonds at all. Those who form such bonds face subtle discrimination, and often take to hiding their relationship from others.

Units of the Consciousness have a "common name," which is usually drawn from a human language, followed by a "unit designator," which is composed of the name of a letter from the Greek alphabet followed by a one-digit number. The unit designator is somehow related to the member's position within the faction, but the rule is not obvious to those not participating in the Consciousness (the Prime Function, for example, is not "Alpha-One" or anything similar).

Prime Function Aki Zeta-Five

215 points

Human female; age 32; 5'6", 134 lbs.; pale skin, unkempt ash-blonde hair, blue eyes. ST 10 [0]; DX 11 [10]; IQ 16 [80]; HT 10 [0].

Speed 5.25; Move 5.

Dodge 6. *Advantages:* Enhanced Time Sense [45]; Intuitive Mathematician [25]; Military

Rank 3 (Lieutenant, Junior Grade) [15]; Unusual Background (Merged with a computer algorithm) [20]. *Disadvantages:* Low Empathy [-15]; No Sense of Humor [-10]; Odious Personal

Habit (Poor grooming) [-5]. *Quirks:* Impatient with emotions and sentiment; Never refers to her past before

Planetfall; Regards herself as only partially human; Treacherous; Utter pragmatist. [-5] *Skills:* Artificial Intelligence-17 [4]#; Computer Operation-17 [2]; Computer

Programming-21 [8]*; Diplomacy-14 [1]; Driving (Automobile)-12 [2]&; Driving (Heavy Wheeled)-12 [2]&; Electronics (Computers)-18 [4]; Electronics Operation (Communications)-17 [4]; Electronics Operation (Computers)-18 [6]; Electronics Operation (Sensors)-17 [4]; Leadership-14 [4]§; Mathematics-19 [4]*; Philosophy (Analytic)-15 [2]; Research-16 [2]; Teaching-16 [2]. *Languages:* English-15 [1]; Finnish (native)-16 [0];

Norwegian-16 [2]; Russian-15 [1].

* Includes +3 for Intuitive Mathematician.

t Includes +2 for Intuitive Mathematician.

§ Includes -3 for Low Empathy.

Bought up from Computer Programming default.

& Bought up from IQ default.

Annikki Luttinen was born in Norway in 2028, her parents simple shopkeepers in an ordinary small town. Early in life, she showed uncommon talent in mathematics and computer science. At the University of Oslo, she earned a doctorate in computer science, specializing in artificial intelligence. She joined the Zakharov Research Institute in 2057, and was one of the engineers handpicked by Prokhor Zakharov to join the *Unity* expedition.

During the *Unity's* construction, Luttinen set up an unauthorized experiment. Using unused processing power on the starship's computer core, she initiated a set of presentient algorithms intended to run for the entire 40-year journey to Chiron. Unfortunately, when the crew revived at journey's end, they found that the experimental program had crashed about three months after launch.

In the rush to repair the starship, there was little time to investigate further - even though there were hints that Luttinen had not acted entirely on her own. Captain Garland gave Luttinen a simple reprimand, then filed the matter for later investigation. Unfortunately, Luttinen was stricken with rheumatic fever in the last days before Planetfall. Unaccounted for in the final exodus, it was assumed that she was killed in the hospital bay when the *Unity* crashed to Planet's surface.

Some time after Planetfall, Luttinen reappeared, dramatically transformed. Her brain and nervous system were fused with a sophisticated computer implant, which apparently ran an algorithm similar to that of her ill-fated experiment. As a result, she shared her consciousness with a machine intelligence, dampening her emotional awareness but sharply boosting her memory and analytic ability. How this union had come about was a mystery, but it had transformed a rather mouse-like computer scientist into "Aki Zeta-Five," a formidable creature quite capable of leading a faction of her own.

Aki Zeta-Five is detached and remorselessly logical, uninterested in appeals to emotion or "human" values. Her logic does not necessarily make her actions *consistent*, and she is quite capable of reversing earlier decisions in response to new information. Some observers outside the Consciousness speculate that she is not quite sane, pointing out that she exhibits signs of bipolar disorder and has ruthlessly betrayed some former associates.

The Data Angels

Ideology is a tool of power. Anyone who dangles a bright, shiny ideal in front of your eyes is likely trying to distract you from the chains they're about to snap around your wrists.

- Datajack Sinder Roze, "Infobop "

Shortly after Planetfall, the colonists struggled to build information networks in support of research and base administration.

The situation was much like the early days of the Internet, in which networks were designed to be immediately useful rather than

rigorously secure. Inevitably, administrators across Planet became aware of hackers in the net. Within a few years, there were widespread rumors about a "network underground," led by a mysterious figure known only by the alias of Sinder Roze.

Datajack Sinder Roze

Human female; age 33; 5'9", 112 lbs.; brown skin, short-cropped black hair, brown eyes.

ST 9 [-10]; DX 11 [10]; IQ 15 [60]; HT 12 [20].

Speed 5.75; Move 5.

Dodge 5.

Advantages: Attractive [5]; Daredevil [15]; Mathematical Ability [10]; Military Rank 3 (Lieutenant, Junior Grade) [15].

Disadvantages: Curious [-5]; Intolerance (Authority figures) [-5]; Trickster [-15]; Workaholic [-5].

Quirks: Fond of quoting Sun Tzu; Frequent dancer and carouser; Insists on listening to Bach while working. [-3]

Skills: Acting-15 [2]; Carousing-12 [2]; Computer Hacking-18 [8]*; Computer Operation-17 [4]; Computer Programming-20 [8]*; Cryptanalysis-16 [1]*; Cryptography-14 [2]; Cryptology-14 [2]; Dancing-10 [1]; Driving (Automobile)-11 [1]#; Electronics (Computers)-18 [6]f; Electronics Operation (Communications)-16 [4]; Electronics Operation (Computers)-16 [4]; Fast-Talk-16 [4]; Forgery-14 [2]; Free Fall-11 [2]; Leadership-15 [2]; Mathematics-17 [2]*; Merchant-15 [2]; Research-15 [2]; Scrounging-16 [2]; Sex Appeal-13 [2]§; Stealth-11 [1]#; Swimming-11 [1]; Vacc Suit-14 [1].

Languages: English (native)-15 [0]

* Includes +3 for Mathematical Ability.

t Includes +2 for Mathematical Ability.

§ Includes +1 for Attractive.

Bought up from IQ default.

Asa Wright was born in the West Indies in 2027, the daughter of two faculty members of the University of **Trinidad**. Her childhood was stable and unexceptional. When she approached adolescence, she revealed the love of excitement and anarchy that would be **typical** of her later career. By her early teens, she topped Interpol's list of most-wanted computer crackers. Under her

is Sinder Roze handle, she made a number of high-profile "burns," stealing assets from major multinational

160 points

corporations and breaking into several military computer nodes around the world.

Investigators traced "Sinder Roze" for years, finally catching up with her after the Markethack Crash of 2049. As it turned out, Asa Wright had nothing to do with the highly publicized cracks into world financial institutions. In the hysteria of the time, however, she was convicted and faced severe penalties. The International Cybercrimes Tribunal offered her clemency if she would renounce the unethical use of computers and lend her talents to the growing **Unity** project,

wright proved indispensable to the mission, creating superb systems architecture for the starship and the planned colony. She eventually volunteered to join the mission herself, in exchange for the sealing of all records of her past criminal activity. This precipitated a lengthy political struggle with Captain Garland, who was already aware of her criminal history and considered her extremely dangerous. In the end, Garland was **overruled and Wright joined the Unity crew.**

During the starship's final crisis, Wright ended up among the Morganite faction. She soon became disgusted with Morgan's obsession with wealth, and with the growing strife between factions. As her anger grew, she returned to her ace-cracker's habits, discreetly gathering like-minded friends from all around Planet. When the time was ripe, it was an easy matter to break away and build her own **faction**. To her, leading her own faction would be the **ultimate**, and eternally ongoing, challenge.

Asa Wright, or Sinder Roze as she always refers to herself today, is a complex individual. She loves the

work of building and maintaining information structures, but she also loves excitement that comes from attacking such structures. In fact she is no true anarchist, but considers herself an archetypal Trickster. She derives satisfaction from causing maximum disruption with a minimum of effort. She holds no strong ideology, and can get along well with anyone who

willing to put up with her behavior.

Data Angel Characters

Only a few members of the Data Angels are true computer jockeys. Most citizens of the faction have other social roles, have no Computer Hacking skill, and are only mildly committed to the hacker ethos. If the Angels share a common trait, it's their personal independence. Overconfidence and Stubbornness are common, and many citizens have Intolerance (Authority figures).

Even, non-hacker Angels are often habitual tinkerers, always playing with gadgets and electronic toys. The 25-point Gadgeteer advantage is particularly appropriate for Data Angel characters.

For a long time, no one took the so-called "Data Angels" seriously. System administrators worked to secure their networks and trap the hackers, but without much success. Finally, in one of Planet's earliest inter-factional crises, the Angels revealed their hand. Dozens of computer experts and hundreds of their friends and supporters vanished from bases around Planet overnight. Among these was the head of Quality Assurance for MorganNet, a woman who turned out to be Sinder Roze herself.

The Angels soon reappeared with their own bases and territory. The established factions (especially the Morganites and University) reacted with outrage, but the Angels had prepared their move well. Logic bombs and trojans, placed within their enemies' networks long before the schism, disrupted attempts at action against them. Whether the other factions liked it or not, the Angels and their anarchistic crusade for information freedom would be a lasting factor in Planet's development.

Beliefs

The Angels aren't interested in idealistic Utopias or cosmic destinies. If they have a coherent ideal at all, it centers on freedom for the individual. They believe that human beings can manage their own destinies just fine if they're left alone. On the other hand, the Angels have a definite (if unsophisticated) moral sense. They despise wealth gained by exploitation, power seized by force, knowledge kept secret, and truth hidden by lies. They feel that the leaders of the

other factions are pompous hypocrites who badly need to be taken down a peg or two.

Relations With Other Factions

Sinder Roze and her Data Angels do their best to remain independent of all other factions. This is wise, since few other factions trust the Data Angels. The Angels are most likely to ally with one of the other democratic factions, such as the Gaians, the Peacekeepers, or the Free Drones. Any such alliance will be a careful one on both sides, with the Angels refusing to be exploited and their allies worried about subtle infiltration.

The Angels hold most other factions in disdain. They are somewhat contemptuous of the Morganites and University, feeling that those factions are too arrogant and pretentious for anyone's good. The Angels are openly hostile to the Spartans and Nautilus Pirates, rejecting the "power for power's sake" philosophy held by those factions.

Strengths

The Data Angels are masters of computer technology. They know Planet's networks better than any other faction. Given half a chance, they can seize control of any computer. They always have the best computers and the most densely woven networks of any faction on

Planet. They also tend to have "back-doors" and "trojan" applications buried in everyone else's systems.

As a faction, the Angels are tireless spies, adept at keeping track of what every other faction is up to. They love the thrill of ferreting out a well-kept secret or ruining the carefully laid plan of an enemy. In between "burns," they play information broker, exchanging intelligence among the other factions (and exacting a profit from each transaction).

Weaknesses

The Angels' love of freedom extends to their own faction. When the Angels don't face an immediate crisis, their members are stubbornly independent and difficult to manage. They constantly disagree on goals and methods, and must be led through persuasion rather than command. One consequence of this anarchism is that the Angels have difficulty mounting major offensive actions against other factions.

Lifestyle

The Angels enjoy creature comforts and entertainment. This is especially true of faction members who are *not* ace hackers. The farmers, engineers, scientists, and laborers who make up the community's support network are particularly fond of luxuries. Even the hacker elite indulges in good food, intoxicants, and elaborate roleplaying games when not pursuing a ragged burn.

The Data Angels are nominally led by a senior executive called the "Datajack." This figure presides over a pure democracy in which all serious issues are decided by a vote of the entire faction membership. Datajack Sinder Roze must manage her fractious followers through persuasion, intimidation, and sheer mastery of their shared technical craft. This last factor is particularly important. The Angels grant a great deal of status to those who can execute difficult burns or "count coup" on powerful faction enemies.

Administration is more informal among the Angels than in any other faction. Any Angel is free to identify a job that needs to be done and try to make a profit while doing it. There is also a strong "gift economy" among the Angels, in which people win social status by contributing to the community's well-being. This arrangement is moderately effective at meeting the faction's needs in areas that the free-enterprise system might miss.

Data Angels tend to wear simple but stylish clothing. They have a definite sense of fashion, but that sense changes from year to year. Of course, functional and unpretentious work

clothes are always in style. The Angels tend to accumulate lots of personal toys and gadgets, which

Free

Without our work, nothing is built. Without our work, no wealth is gathered. Without our work, no secrets are discovered. Without our work, no base can be defended. Now you tell me: why should our work be taken for the benefit of others?

- Foreman Domai, "Manifesto "

The first industrial efforts on Planet were extremely labor-intensive. Factory hands worked interminable hours at tasks requiring bone-breaking effort. The "Talents" who led each faction could avoid such assignments, busy with the high-tech work of managing the settlement. That left factory labor for the "drones," the workers who lacked advanced skills or whose skills had proven useless in the fight for survival on Planet. Naturally, the drones were unhappy with their lot in life. Every faction had to deal with drone resentment. Some appealed to patriotism, or directed production toward consumer goods. Others used brutal discipline, drugs, and nerve stapling.

Domai was one such drone, working under horrific conditions in the depths of the Human Hive (p. 35). He had a surprising ability to resist punishment, and managed to retain his clarity of thought. Eventually, he organized the first of Planet's drone revolts, leading hundreds of Hive drones out into the wilderness to establish an independent state. Drones from other factions began to escape and join the rebellion.

Soon, "Foreman" Domai found himself leading an ideological faction of his own, devoted to the cause of freedom and equal in power to any of the older factions.

Beliefs

The Free Drone ideology is essentially a revival of old Earth-based socialism. Resources and labor are to be used to build a just society for all, not to enrich a wealthy few at the expense of everyone else. Justice means an orderly and law-abiding society, but one in which the goods produced by labor are distributed for the benefit of everyone.

The Free Drones are aggressively egalitarian, mistrusting elites of all sorts. The same reaction is directed toward those who hoard wealth, claim superior intelligence, sport improved genetic traits, or affect refined social graces. The ideal Free Drone is a strong individual, with simple tastes and plenty of enthusiasm for hard work, who doesn't waste time looking for ways to set himself above his fellow citizens.

Adventure Seed: Come the Revolution

One interesting way to approach the Data Angels is to examine the history of the faction *before* it became independent. PCs could be potential Angels living in an established faction, trying to influence events from behind the scenes, gathering resources in preparation for independence. The GM may also consider changing Sinder Roze's background, placing her with a faction other than the Morganites or replacing her with a different leader.

they carry along wherever they go.

The best of these are not only entertaining, but also useful in a crisis.

Drones

Relations With Other Factions

Domai and his Free Drones are aloof and independent. They regard most other factions as potential enemies, and are reluctant to ally with those who might later become foes. Domai is most friendly toward Pravin Lai and his Peacekeepers.

The Free Drones are fierce enemies of the Human Hive, remembering their origins as Hive slaves. They also despise the Morganites (regarding them as capitalist oppressors), as well as the Consciousness and University (holding their intellectual elitism in contempt). The Drones are not inevitably opposed to the "green" factions such as the Gaians and Planet Cult, but their aggressive industrial development is likely to draw fire from those groups.

Strengths

The Free Drones usually manage to maintain the egalitarian society they idealize. Their society is less stratified than anyone else's, and as a result they have relatively little social

Foreman Domai

185 points

Human male; age 49; 6'5", 220 lbs.; tanned skin, short black hair, dark brown eyes, prominent drone tattoo.

ST 13 [30]; DX 12 [20]; IQ 13 [30]; HT 12 [20].

Speed 6.00; Move 6.

Dodge 6.

Advantages: Charisma +2 [10]; Fit [5]; Resistant to Poison [5]

Disadvantages: Intolerance (Elitists) [-5]; Sense of Duty (Drones and other laborers) [-10]; Stubbornness [-5]; Workaholic [-5]

Quirks: Affects working-class accent; Man of few words; Reads books on politics and military strategy; Refuses to accept privileges; Violent temper. [-5]

Skills: Administration-13 [2]; Bard-16 [4]f; Brawling-14 [4]; Carousing-12 [2]; Climbing-12 [2]; Computer Operation-14 [2]; Demolition-15 [4]§; Diplomacy-11 [1]; Driving (Automobile)-11 [1]; Driving (Heavy Wheeled)-12 [2]; Electronics Operation (Communications)-12 [1]; Electronics Operation (Sensors)-12 [1]; Engineer (Mining)-16 [10]; Fast-Talk-13 [21]; First Aid-13 [11]; Free Fall-12 [2]; Geology-14 [6]; Guns (Light Automatic)- [1]*; Guns (Rifle)-15 [2]*; Hiking-12 [2]; Intimidation-13 [2]; Knife-12 [1]; Leadership-16 [4]f; Mechanic (Mining Equipment)-14 [4]; Merchant-13 [2]; Metallurgy-12 [2]; Orienteering-13 [2]; Physics-12 [2]; Politics-12 [1]; Prospecting-15 [6]; Scrounging-14 [2]; Stealth-12 [2]; Streetwise-13 [2]; Surveying-13 [2]; Survival (Desert)-12 [1]; Swimming-12 [1]; Tactics-12 [2]; Teaching-13 [2]; Throwing-11 [2]; Vacc Suit-12 [1]

Languages: English (native)-13 [0].

* Includes +2 for IQ

† Includes +2 for Charisma.

§ Bought up from Engineer default.

Domai was originally Arthur Donaldson, an Australian geologist and mining engineer who had been hired to accompany the *Unity* expedition as a civilian contractor. Under the initial mission profile, once the starship arrived at Chiron and the mission crew had established ground-side settlements, Donaldson (and many other civilians) would be revived. His own position was to be that of Director of Planetside Mining

when disaster struck the *Unity*, Donaldson's cryocell malfunctioned, and he awoke into a miasma of toxic gases released by the crippled starship. He survived the experience but suffered minor brain damage, affecting his long-term memory and communication skills. In the final exodus, he was herded into an escape pod with

many similar unfortunates. He arrived on Planet, only to find himself embroiled in the Human Hive.

Donaldson was given the name "Domai" and assigned to work as a common drone in the depths of the Hive.

There, he struggled for several years to regain the use of memory and speech, avoiding drugs and nerve stapling. Eventually, he regained his identity and full intelligence, along with a deep rage against the exploitation of his fellow laborers. A few years after Planetfall, Domai led Planet's first major drone revolt. Against all odds, he and his followers escaped from the Hive and struck out for a distant part of Planet.

Today, Foreman Domai is the leader of his own faction, the "Arthur Donaldson" identity cast off and forgotten. Although he had been sympathetic to working-class politics even on Earth, his experiences on the *Unity* and in the depths of the Hive seem to have made him a fiery radical. His entire worldview now centers on an implacable class struggle, in which workers are constantly at war with the elitist oppressors who exploit them. Domai is a stubborn foe, prone to violence and willing to sacrifice many lives to win battles.

unrest. Their workers are highly motivated and extremely productive. Their very existence is a beacon of hope to the underclass of every other

The Free Drones don't work overly hard to "export" their revolution, but often escape to the Free Drones one

by one. When a drone revolt takes place in another faction's base, the population has been known to join the Free Drone movement en masse.

Free Drone Characters

The Free Drones exhibit every kind of physique, but the ideal faction member is strong and tough. Above-average ST and HT scores are common, as are advantages such as High Pain Threshold and Toughness. Free Drones are expected to be hardworking; the Laziness disadvantage is both uncommon and unacceptable, and Free Drones who have it will usually have a negative Reputation as well.

Since Free Drone society places such high value on productive labor, almost all faction members will have at least a few points in each of Computer Operation, Electronics Operation, and Mechanic.

Weaknesses

Since the Free Drones mistrust intellectual elitism, they don't pursue cutting-edge scientific research. As a result, the faction's citizens often find themselves forced to buy technology from others or make do with second-rate equipment.

Adventure Seed: Campaign

The PCs are enlisted by a minor Free Drone leader to help him win election to higher office. Their stated job is to provide security at campaign rallies, but they may also be called on to provide muscle against the supporters of rival candidates. For variety, they might even be set to dig up secrets that serve to discredit those rivals - even a plausible exaggeration will do!

Domai and his followers are committed industrialists. They are pragmatic enough to avoid provoking a response from Planet's native life whenever possible; however, if a needed project will cause ecological damage, then they are likely to proceed anyway.

Lifestyle

Free Drone bases are rough-hewn and dirty places, but they are also busy and productive. The local lifestyle may lack refinement, but it

pulses with energy and enthusiasm. The Drones work hard, play hard, and enjoy their lives with gusto.

The Drones run a democratic state, electing their "cell leaders" and "foremen" for fixed terms of service. Election campaigns are vigorous affairs, full of fiery speeches, mob enthusiasm, and plenty of strong-arm tactics. Elected leaders enforce the law and have some role in making it as well, but final sovereign authority rests with the citizenry. Most laws are passed in raucous citizen assemblies,

and a jury of ordinary citizens decides all civil or criminal disputes.

Elected leaders are expected to be "men of the people," examples of Free Drone ideals. Even Foreman Domai lives in a small apartment much like any other, and works his share of shifts on the construction site or factory floor. Free Drone government is short on formal procedures, but it seems to work. Despite their taste for informal methods, the Drones respect the rule of law and will always pull together in a crisis.

Free Drone citizens tend to wear coveralls or other strictly utilitarian garb, and carry the tools of their trade. Many citizens who escaped from other factions have ID tattoos from their time as drone slaves. These marks are borne with particular pride, and in fact there is something of a fashion for tattoos of all kinds.

Gaia's Stepdaughters

In the end, our devotion to Planet is driven by faith. While the other factions prosper by carelessly devouring the wealth of Planet, we stand firm in our belief that Planet has moral significance of its own. They gain strength from plunder. We gain strength from the beauty and value of the thing we serve. - Lady Deirdre Skye, "Arguments in Council"

Among the *Unity* colonists there were many who had suffered in (and fought against) the ecological catastrophes of Earth, and who were determined not to see the same happen on Planet. These "greens" found a natural leader in Deirdre Skye, the mission's Chief Botanist/Xenobiologist. Skye was a formidable scientist and engineer, having designed not only the starship's greenhouses, but also many of the genetically altered plants that lived in them.

Skye managed to save many of the hybrid strains she had developed, and gave them a new home on Planet. With her went many colonists who had worked with her in the past, or who simply agreed with her ethical position. After landing, Skye and her followers were among the first to build a strongly unified faction based on ideology. Before long, the other

factions were calling them "Gaia's Stepdaughters," a label intended in scorn, but which the Gaians accepted with pride.

Beliefs

The Gaians are committed environmentalists. They believe that in order to survive and prosper, human beings must find ways to work within Planet's natural ecosystems. They constantly seek ways to pursue agricultural and industrial development without harming native life.

Many faction members are accomplished scientists and engineers, committed to a life of rational inquiry. Even so, the Gaians have developed a richly spiritual culture. Reverence for Planet does not (quite) rise to the level of a formal religion, but many Gaians do engage in

meditation and spiritual exercises designed to bolster their devotion. Lady Deirdre tries to avoid any appearance of acting as a "high priestess," but even she has written a number of pseudo-religious works that are used by her people.

Relations With Other Factions

The Gaians are a pacifistic faction, willing to deal with most others so long as they are left alone to pursue their own ideals. Their democratic leanings make them likely partners for the Peacekeepers and (sometimes) the Data Angels.

The Gaians oppose any faction which moves to "exploit" Planet. They are bitter foes of the Morganites, and also disapprove of the Free Drones' aggressive industrial development.

Relations between the Gaians and the Planet Cult are surprisingly

ambivalent. The two factions share a devotion to Planet's natural ecology, but the Planet Cult is far too aggressive and dogmatic for Skye and her followers to be comfortable with. Skye is usually willing to deal with the Cultists, but she is always careful to keep them at arm's length.

Strengths

The Gaians have exceptional skill in the biological sciences. This allows them to run their bases with superb efficiency. It also gives them an advantage when dealing with Planet's native ecology. Gaians quickly learn how to survive in Planet's wilderness, including the vast fields of xenofungus. They also find that their activities are less likely to trigger a violent response from Planet. They are among the first to discover the potential of psionics, discovering early on how to "capture" mind worms and similar native life forms.

Lady Deirdre Skye

190 points

Human female; age 35; 5'7", 115 lbs.; pale skin, long dark-brown hair, blue eyes. **ST** 10 [0]; **DX** 12 [20]; **IQ** 14 [45]; **HT** 12 [20].

Speed 6.00; Move 6.

Dodge 6. *Advantages:* Beautiful [15]; Empathy [15]; Military Rank 4 (Lt).

Commander) [20]; Strong Will +1 [4]. *Disadvantages:* Fanaticism (Environmentalism) [-15]; Sense of Duty (Loyal

followers) [-10]; Shyness (Mild) [-5]. *Quirks:* Fonder of plants than of people; Introverted; Scottish brogue grows

thicker under stress; Writes volumes of poetry. [-4] *Skills:*

Administration-14 [2]; Agronomy-15 [4]; Biochemistry-14 [8]; Botany-16 [8]; Chemistry-14 [4]; Computer Operation-15 [2]; Computer Programming-12 [1]; Driving (Heavy Wheeled)-12 [2]; Ecology-17 [10]; First Aid-15 [2]; Free Fall-12 [2]; Genetics-16 [16]; Hiking-12 [2]; Leadership-13 [2]*; Naturalist-15 [6]; Poetry-13 [1]; Research-15 [4]; Swimming-13 [2]; Teaching-13 [2]*; Vacc Suit-13 [1]; Writing-14 [2]; Zoology-13 [2]. *Languages:* English

(native)-14 [0].

* Includes -1 for Shyness.

Born in Scotland, Deirdre Skye was the only daughter of a U.N. security consultant who spent much of his time involved in one geopolitical crisis after another. Her parents divorced when she was still quite young, and her mother effectively abandoned her afterward. She was raised by a series of nannies and private schools, leaving her introverted and detached from most normal emotional relationships.

Skye eventually studied at Cornell University, where she earned degrees in agriculture, environmental biology, and genetics. After earning her doctorate, she was employed at the Bionex research facility in White Plains, New York, where she gained a reputation as a world-class geneticist, developing dramatically improved strains of various crop plants. Later, she worked for the Red Cross and the U.N. Disaster Relief Fund, developing plant strains that could survive in soil contaminated by radiation or heavy metals. In the late 2040s, she was often mentioned as a potential Nobel candidate, although she had not yet won the prize when she left Earth aboard the *Unity*.

Deirdre Skye remains a brilliant scientist, but since joining the *Unity* expedition she has also become an ideological leader. She is committed to ecological stewardship, and demands that the expedition avoid repeating what she terms the "tragedies" of Earth. In some ways, her devotion to the environment is non-rational, and she often argues for it in near-religious terms (this is why, despite her talent as a scientist, Prokhor Zakharov opposed her presence on the expedition). She has gathered a devoted following among the expedition's agronomists and biologists.



FACTIONS

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Weaknesses

The Gaians are pacifists. They make poor soldiers, lacking a strong sense of military discipline and neglecting weapons technologies. Their mistrust of coercion extends to their own society as well. The Gaians have a strong preference for open democracy, and so are unable to use harsh methods to deal with social unrest.

As a result of their ideology, the Gaians are often slow to pursue industrial development. Gaians must often make do with less, especially in battle.

Lifestyle

The Gaians might not pursue opulent luxuries, but they do have a strong sense of aesthetics. Gaian bases are among the most beautiful on Planet, full of sunlight, lush gardens, and tasteful works of art. Personal quarters tend to be small but comfortable, while public spaces are large and designed for constant use. Most Gaian art is public in nature: murals, carefully designed gardens, or performances of music and drama.

Gaian communities are arranged along democratic lines, with most decisions in the hands of an elected Council. Although Lady Deirdre holds an unelected position of supreme leadership, she is more a constitutional monarch than a dictator. Her own instincts prompt her to

provide moral leadership while listening to the faction Council and leaving most day-to-day administration in its hands. The lower levels of Gaian society are informal, with each work team electing its own leader as needed. The military alone has a strict hierarchy of command, but then the Gaian military is a relatively small institution.

Gaian society is unique among Planet's factions in its near-matriarchal structure. In theory, the Gaians practice complete gender equality, with men and women sharing all aspects of community life. In practice, a noticeable majority of Gaian leaders are women, from Lady Deirdre all the way down to first-level work-team leaders. The Gaians themselves aren't certain why this is, since few of them consciously engage in gender discrimination.

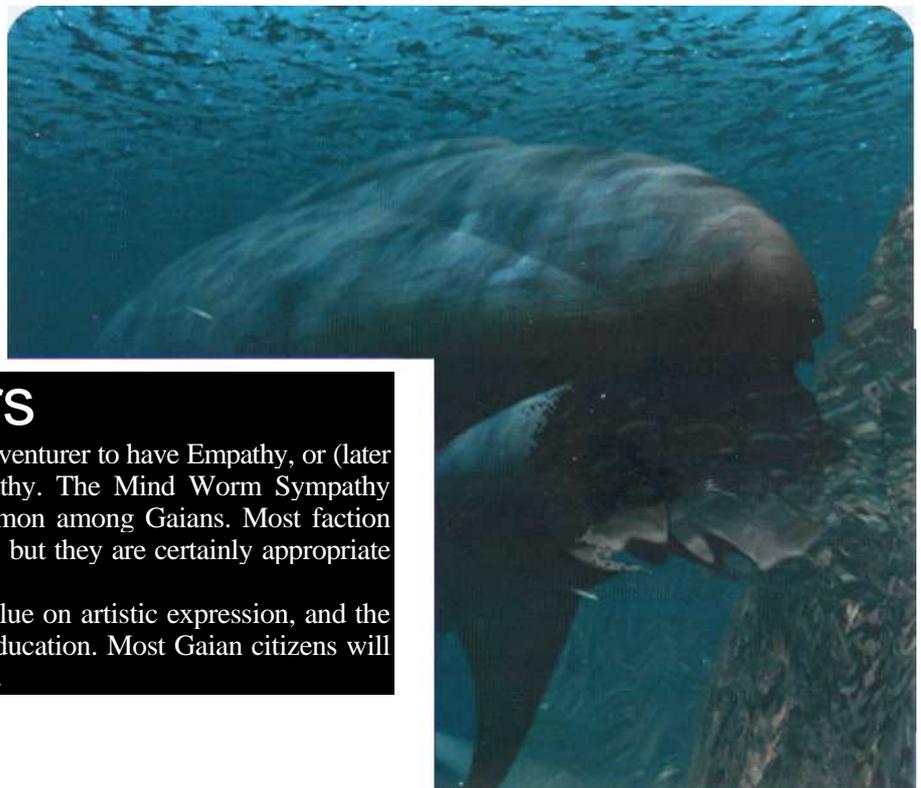
In public, Gaian citizens normally wear simple and functional clothing, often with the faction's "thorned rose" insignia displayed in the form of a pin or a brooch. In private, they are more relaxed, wearing whatever



Adventure Seed: Encounter With a Monster

The Gaians were among the first to interact closely with Planet's native life, and indeed a Gaian citizen was the first human to "bond" telepathically with a mind-worm boil (p. 18). -In the years after Planetfall, Gaian adventurers are likely to be sent to study native life in its natural setting. Many puzzle-solving adventures can follow, with added tension since much of the native life is *extremely* dangerous. . .

seems most comfortable or attractive. Gaian equipment is relatively scarce, but it is usually designed for high reliability and it is always well maintained.



Gaian Characters

It would be reasonable for any Gaian adventurer to have Empathy, or (later in colonial history) even trained Telepathy. The Mind Worm Sympathy advantage (p. 88) is also relatively common among Gaians. Most faction members will have neither of these traits, but they are certainly appropriate for PCs.

Gaian society places a great deal of value on artistic expression, and the arts are an important part of childhood education. Most Gaian citizens will have at least a point in some Artistic skill.

The Human Hive

Chairman Sheng-Ji Yang

295 points

Human male; age 61; 5'7", 161 lbs.; golden-brown skin, short white hair, brown eyes. ST 9 [-10]; DX 14 [45]; IQ 16 [80]; HT 11 [10].

Speed 6.25; Move 6.

Dodge 7. *Advantages:* Charisma +3 [15]; Combat Reflexes [15]; High Pain Threshold

[10]; Military Rank 5 (Commander) [25]; Strong Will +3 [12].

Disadvantages: No Sense of Humor [-10]; Paranoia [-10]. *Quirks:* Fond of teaching; Ignores all appeals to emotion; Never

raises his voice; Quotes Chinese philosophers and poets; Ruthless. [-5] *Skills:* Acrobatics-14 [4]; Administration-16 [2]; Artist-15 [2];

Bard-19 [2]*; Breath Control-14 [2]; Calligraphy-14 [1]§; Computer Operation-17 [2]; Criminology-16 [2]; Detect Lies-15 [2]; Diagnosis-15 [2]; Diplomacy-15 [2]; Escape-13 [2]; Free Fall-14 [2]; Guns (Light Automatic)-16 [1]f; Guns (Machine Pistol)-16 [1]f; Herbalist-15 [2]; History-15 [2]; Hypnotism-17 [6]; Intelligence Analysis-16 [4]; Interrogation-17 [4]; Karate-16 [16]; Leadership-22 [8]*; Literature-16 [4]; Mathematics-15 [2]; Philosophy (Chinese Legalism)-15 [2]; Physician-15 [2]; Poetry-16 [2]; Politics-17 [4]; Psychology-17 [6]; Savoir-Faire (Military)-17 [2]; Stealth-14 [2]; Swimming-15 [2]; Tactics-17 [6]; Teaching-17 [4]; Vacc Suit-15 [1];

Writing-16 [2]. *Languages:* Cantonese-16 [2]; English-16 [2]; Japanese-16 [2];

Mandarin (native)-16 [0].

* Includes +3 for Charisma.

t Includes +2 for IQ.

§ Bought up from Artist default.

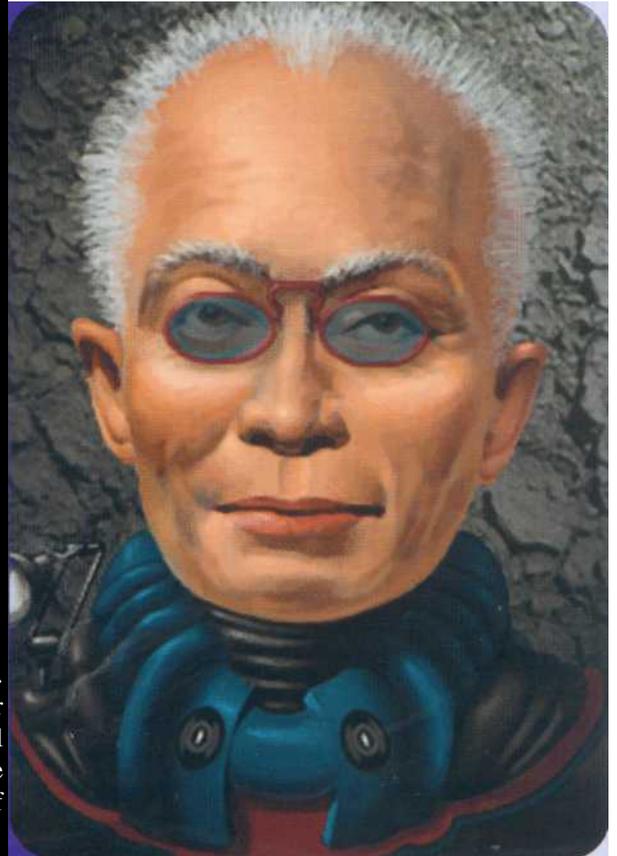
Sheng-Ji Yang was born before the turn of the century in Wuhan, China, the son of a prominent scholar of Chinese literature. While still attending Beijing University, he was recognized as a master of the Five Excellences: calligraphy, poetry, painting, traditional medicine, and martial arts. While earning degrees in Chinese literature and military history, Sheng-Ji Yang took part in the Great Revival of traditional culture that swept the People's Republic at that time.

After the collapse of the Communist regime, Chinese politics became unstable. Sheng-Ji Yang turned to a military career. As an officer, he took part in the Second Golden Revolution and became a personal confidante of the Golden Emperor. After 2032, he commanded the Emperor's personal security force. He vanished during the bloody Crimson Succession of 2039. At first he was presumed dead, but a few years later he appeared in Geneva and joined the U.N. security forces. Despite opposition from the Chinese government, he won a berth on the *Unity* and was named Chief of Security.

Sheng-Ji Yang is probably the most talented individual on the starship, and is certainly considered the most dangerous by Captain Garland. His mind is extraordinarily deep and powerful, with perfect recall and an iron will. He has almost perfect control of his mind and body, and can exert a near supernatural control over other people as well. Calm and rational even under extreme pressure, he is in some ways a sociopath, supremely able to manipulate the emotional responses of others while never permitting them to affect his own.

I tell you that every man is an accident, a twig on the tree of life, an animal which can barely be called sentient or self-aware. If our lives have any meaning, it is as part of the greater whole, which existed long before us and will exist long after we are gone. Those of us who are aware of this fact must step forward, to guide those who remain snugly wrapped in their illusions.

- Chairman Sheng-Ji Yang,
"Looking God in the Eye"



Sheng-Ji Yang is a teacher, a poet, a psychologist, a martial artist - perhaps the most enigmatic and powerful individual to travel on board the *Unity*. During the crew rebellion at the end of the starship's journey, he was captured by Santiago's Spartans. Alone and unarmed, he managed to escape and return to his loyal Security forces, nearly regaining control of the ship in its last hours. Seeing that the attempt was futile, he called his Security teams and any other crew he could find to an escape pod. He made it to Planet's surface . . . and apparently vanished.

Hive Characters

Hive citizens differ widely depending on their role in faction society. Most citizens are highly specialized, discouraged from learning any skills not immediately useful to their daily work. Ordinary laborers may even be illiterate, forced to receive instructions verbally or through iconic symbols. Technical specialists will have a wider variety of skills, but even they will usually lack "irrelevant" expertise. The rarest skills are those involved in cultural sophistication. Only senior military officers and members of base leadership cadres will be truly well rounded, permitted and even encouraged to learn skills such as History, Literature, and Politics.

From the earliest days of the Hive, ideological commitment is a requirement for advancement. Any character free enough to serve as an adventurer will likely have at least quirk-level commitment to the Chairman's ideology, and many will have a full-blown Sense of Duty. Of course, some citizens will have Secret (Dissident), which is probably worth -20 or even -30 points within Hive society.

The other colonists did not hear from Yang for many years, and assumed that he and his people had not survived. Eventually, they learned the terrifying truth. Yang's base of operations is an underground warren in which his people live under a pervasive police state. He claims that he is building a Utopia for his people, but it is a dark paradise of absolute control. The first visitors from other factions tagged it "the Hive," and Yang's faction has ever after been known by that name.

Beliefs

Sheng-Ji Yang is dedicated to the construction of a secure and perfectly controlled society. He believes that human beings have value only insofar as they contribute to the continued existence and growth of the human species. Those few who have attained a superior understanding of the universe thus have a duty to lead the rest of humanity, without regard for individual rights or dignity. The Chairman calls such an understanding "enlightenment," and thinks of himself as a teacher rather than as a dictator.

The Chairman's "enlightenment" is a profoundly nihilistic view. He does not believe that the universe has any meaning or purpose other than that which the enlightened mind can impose upon it through force of will. Indeed, the exercise of will is central

to Yang's motivation. To him, the ideal human being is one who can perfectly control the people and the physical world around him.

The beliefs of the Hive's other citizens are irrelevant. Those who have attained some level of enlightenment (by Yang's standards) form the ruling class. Those who have not do as they are told.

Relations With Other Factions

Sheng-Ji Yang and his Human Hive deal with other factions pragmatically. The Hive will gladly ally with another faction, if such an alliance will bring it greater power and security. The moment such an alliance is no longer in the Hive's interest, it will turn on its ally at once.

In general, Sheng-Ji Yang despises democracy and will behave aggressively toward any faction living under a democratic government. As a result, the Hive is likely to be an implacable foe for the Gaians, the Peacekeepers, or the Data Angels. The Hive is also a bitter enemy of the Free Drones, who began their existence as a drone rebellion within a Hive base.

Strengths

The Hive's habit of building underground makes its bases easy to defend from hostile native life or other colonists. On the other hand, since building underground is expensive, the Hive suffers from crowding that would be unacceptable to other factions. This is exacerbated by the fact that the state encourages citizens to raise large families. Hive bases are crowded and busy places, full of hard-working citizens.

The brutal police state and planned economics practiced by the Hive are more efficient than might be expected. The Chairman is the proverbial incorruptible man, and he watches his subordinates closely for any sign of laziness or corruption. As a result, the Hive is exceptionally productive on large-scale projects that can attract the Chairman's attention.

Weaknesses

The Hive is good at producing industrial goods, but it is often faced with energy shortages - in part because Hive bases tend to stand aloof from trade and hence the inter-factional "energy economy." Coupled with the fact that Hive citizens are violently discouraged from showing personal initiative, this leads to poor commercial performance.

In many ways, the Human Hive resembles Stalinist Russia. The security apparatus is quite effective, but it is unable to prevent all social unrest. The common citizens and drones are usually sullen and often resentful. Drone riots are not overly frequent in Hive bases, but they tend to be particularly violent when they do occur.

Lifestyle

Hive bases are strictly utilitarian, with little in the way of art or luxury to soften the harshness of life. Most citizens face an endless round of work, with little time to relax or pursue personal interests. Their common recreations include tranquilizers, euphoric drugs, group exercise, and sex.

In the Hive, it is impossible to get away from the mass of humanity. Hive citizens spend their days surrounded by crowds, unable to find solitude for more than a few moments at a time. Few citizens even have private quarters - they sleep in vast bunkrooms, eat in communal feeding bays, and spend the rest of their time at work. Only the ruling elite has personal quarters in which they can shut out the rest of the world.

The Hive is an absolute totalitarian state, with Chairman Sheng-Ji Yang and his immediate circle of advisors in command. From the earliest days of the settlement, it applies police-state methods to keep the population in line. Certain groups have special privileges, such as scientists, the military, and the secret police. Everyone is under surveillance, however, and subject to punishment or nerve stapling if they display anything but complete loyalty to the state.

Morgan Industries

Wealth is the universe's way of rewarding those who are clever and efficient. Those who scorn it are turning their backs on the imperatives of life. They should be careful. We all know what happens to those who lose at the game of evolution.

- CEO Nwabudike Morgan, "The Centauri Monopoly"

Nwabudike Morgan should not have been on the *Unity* at all. Yet as the repair crews moved through the ship during its last days, they found an extra cryocell that was not on any of the ship's manifests. The stowaway turned out to be Morgan, the great African tycoon whose business empire had served as a contractor for much of the starship's construction. Apparently, Morgan had used his position to place himself on the *Unity* at the last moment, thus escaping the death of Earth.

Morgan proved to be remarkably resourceful. He had no official position in the crew and was not accompanied by any of his Earthside advisors, yet he managed to force his way into the senior officers' deliberations, and persuaded a number of crewmen to follow his lead in the final crisis. After arriving on Planet's surface, many of the crew were horrified at the prospect of living a harsh, brutal existence for the rest of their lives. Morgan won many followers, and eventually worked his way into a position of faction leadership by promising wealth and luxury for all. In the end, he reestablished Morgan Industries on the new world and laid long-term plans for the ultimate monopoly over all human endeavor.

Beliefs

Morgan and his followers are devoted to free-market capitalism. They are strongly libertarian in outlook, advocating the right of individuals to make free economic choices, enter into contracts, and hold property. This leads them to prefer a democratic society, at least in theory. In practice, they have revived the old distinction between tycoons (who have a significant voice in policymaking) and employees (who are generally required to do as they are told). Thus while all Morganites are

theoretically equal, the wealthy wield much more social power and influence.

Relations With Other Factions

Morgan and his "employees" are usually willing to deal with any other faction. They will approach other factions to offer trade or contracted services, willing to ensure that both sides benefit. Naturally, the Morganites are sharp dealers and will strive to win advantage for themselves out of every transaction.

However, the Morganites despise Deirdre Skye and her Gaians, regarding their "green" ideology as dangerous and holding their pacifism in contempt. Morgan and his people also abhor the Planet Cult, although in this case their hatred of the "green theocracy" is tempered by respect for the Cult's military prowess. Relations with the Data Angels and Free Drones are often poor, since both factions regard Morgan as a capitalist oppressor.

Strengths

Morganites are usually wealthy, both in material goods and in energy. The faction as a whole is adept at extracting profit from the exploitation of natural resources and from trade with other factions.

Weaknesses

Much of the Morganite economy is devoted to luxuries and consumer goods. As a result, the faction is unable to maintain large military forces. In any case, individual Morganites make poor soldiers and usually try to avoid military service.

CEO Nwabudike Morgan

160 points

Human male; age 55; 5'8", 156 lbs.; dark brown skin, short white hair, dark brown eyes. ST 10 [0]; DX 12 [20]; IQ 14 [45]; HT 11 [10].

Speed 5.75; Move 5.

Dodge 5.

Advantages: Charisma +2 [10]; Voice [10]. *Disadvantages:* Code of Honor (Businessman's) [-5]; Greed [-15];

Overconfidence [-10]. *Quirks:* Fond of luxuries; Hates to lose; Preaches greed as a social virtue; Proud

of quality of work; Views life as a series of transactions. [-5] *Skills:*

Accounting-14 [3]§; Administration-18 [8]§; Appreciate Beauty-13

[4]; Bard-19 [4]*f; Carousing-11 [2]; Computer Operation-15 [2]; Detect Lies-13 [2]; Diplomacy-18 [8]*; Driving (Automobile)-12 [2]; Economics-16 [7 1/2]§; Electronics Operation (Communications)-14 [2]; Fast-Talk-16 [6]; Free Fall-10 [1/2]; Gambling-14 [2]; Law (Corporate)-13/19 [4]; Leadership-17 [4]t; Mathematics-13 [2]; Merchant-17 [8]; Piloting (Light Airplane)-12 [2]; Politics-18 [6]*; Research-14 [2]; Savoir-Faire-17 [2]*; Savoir-Faire (Military)-17 [2]*; Sex Appeal-13 [2]*; Streetwise-14 [2]; Vacc Suit-14 [2]; Writing-14 [2]. *Languages:* Arabic-13 [1]; English (native)-14 [0]; French-14 [2]; German-13

[1]; Japanese-13 [1]; Russian-13 [1]; Spanish-13 [1].

* Includes +2 for Voice.

t Includes +2 for Charisma.

§ Bought up from Merchant default.

Born to an old noble family in Kenya, Nwabudike Morgan built a world-class business empire from the ground up. Seed money from his family went to buying and selling weapons during the Sahara Burst Wars. Profits from that venture backed a mercenary force that toppled the government of Namibia and gave Morgan control of many of that country's rich diamond mines. From there, he diversified. By the early 2050s, he had a vast empire that included mercenary and security forces, agribusinesses and food-transport corporations, and a worldwide chain of hotel fortresses "for the discriminating executive."

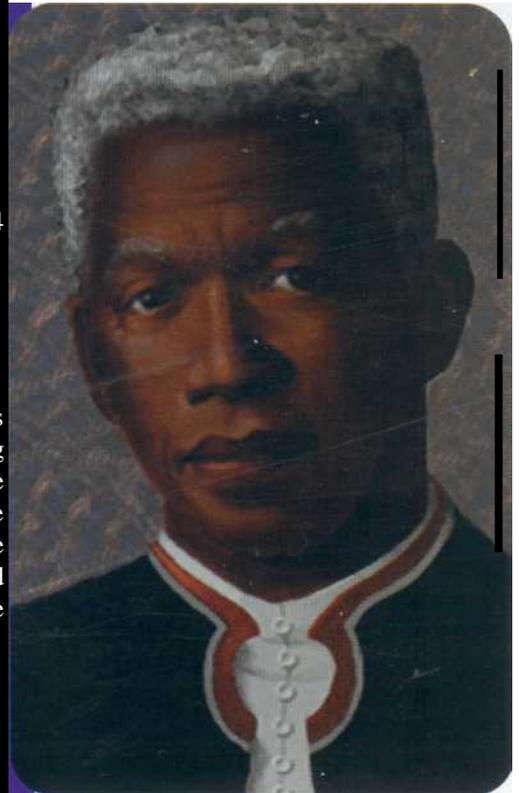
In the late 2050s, the Russian government was a major partner in the *Unity* project. When the Russian economic system collapsed in 2058, Morgan Industries stepped in to buy out many of the construction contracts previously held by Russian interests. Morgan made public statements on a number of occasions, calling the *Unity* project "humanity's last hope." He gave the work his personal attention and won high praise in the world press for his selfless devotion.

Then, just before the *Unity* was launched, Morgan vanished. His lieutenants claimed that he had simply gone into retreat to develop new business ventures. He had not yet reappeared when the Earth's final crisis erupted.

As it turned out, Morgan had *stowed away* aboard the starship, using his corporate control over portions of the construction to ensure that he and a few of his most prized possessions would be aboard at launch time. A few days before Planetfall, his cryocell was opened and he emerged to play a role in the final struggle for control of the starship.

Nwabudike Morgan is a self-confident, even arrogant individual. To him, life is a game of status measured by economic success, and he loves that game for its own sake. He has few ethical values beyond the acquisition of wealth, although he does believe in the fulfillment of contracts. Thus, once he gives his word, it can be relied on. He believes that any interaction can be controlled if the right inducements (money, affection, the threat of harm) can be brought to the table. As a faction leader, he portrays himself as an affable businessman, willing to work for anyone - but make no mistake: in the end he intends to move from merchant prince to emperor.

Children are an economic liability under the Morganite social system. They need to be fed, clothed, and educated at their parents' expense, and by the time they reach adulthood they become "independent" (and so make no economic return to their parents). As a result, Morganite bases tend to have relatively low populations and often suffer labor shortages.



Lifestyle

The Morgan way of life is more opulent than that of any other faction. All but the most chronically unsuccessful Morganites enjoy spacious living quarters, plenty to eat, comfortable clothing, sophisticated entertainments, and *objets d'art*. Naturally, these vary in quality depending on price. An ordinary citizen lives much as a middle-class American might have done before the great disasters on Earth. CEO Morgan and his fellow tycoons live lives of unimaginable luxury.

Upon landing on Planet, Morgan established "Morgan Industries" and set up a system of shared ownership for all of his followers (in effect, he

issued shares of stock in the new corporation). Over time, Morgan Industries created new "business

Morganite Characters

Morganite citizens (or "employees") are a diverse lot, with a wide range of skills and talents. The ideal Morganite is an expert in a technical or administrative skill, has some level of Merchant skill, and adheres to Code of Honor (Businessman's). Few Morganites really live up to this ideal. A *stereotyped* Morganite would have some combination of Greed, Miserliness, and Overconfidence. A surprising number of Morganites have Honesty - even most of the faction's tycoons work "through the system" as much as possible. Naturally, the Honesty disadvantage refers to the laws of the Morganite faction; employees of Morgan Industries don't usually feel bound by the economic or social mores of *other* factions!

units," each effectively an independent subsidiary of Morgan Industries, headquartered in a new Morganite base. Thus, latter-built bases have names such as "Morgan Trade Center" or "Morgan Robotics," each indicating the Morgan Industries subsidiary that dominates the local economy. Morganite citizens are encouraged to set up businesses of their own, pursuing private trade opportunities or acting as subcontractors to one of Morgan Industries' business units.

In theory, the Morganites recognize U.N. authority and have their own elected officials to administer the colony charter. In practice, most decisions of any importance take place in corporate boardrooms. Since almost all citizens hold stock in one or many corporations, they have at least some voice in public policy through shareholders' meetings. Of course, the great tycoons hold thousands of times as many shares as any ordinary citizen, so their influence is considerably greater.

There is a dark side to Morgan's glittering capitalist Utopia. Business competition is almost completely unregulated, and involves all manner of underhanded dealings. Those who are unwilling or unable to hold a job receive no charity, and are likely to be forced out into the wilderness if not supported by a "productive" citizen. Some citizens manage to survive only by taking dangerous or degrading work (medical test subject, deep-bore miner, prostitute, etc.).

Adventure Seed: Greed Is Good

Shortly after Planetfall, one colonist group is struggling to survive its new environment. Nwabudike Morgan is just one of several potential leaders, and not the most obvious candidate for overall command. He will be trying to make his case to the rest of the colonists, possibly against the opposition of military officers, scientists, or members of the U.N. bureaucracy. Colonists will need to decide which side they are on, and then survive the inevitable showdown . . .

Peacekeeping Forces

Certainly, Planet has its own dynamic, but it also represents a blank slate on which we humans write our own aspirations. It was never inevitable that we should divide our scattered settlements into ideological states. We can still reverse that division and meet Planet's challenges as a united species, if that is what we choose to do.

- Commissioner Pravin Lal, "A Social History of Planet"

Pravin Lal was the Chief Surgeon aboard the *Unity*. Although he was not second-in-command aboard the starship, he was the senior officer most dedicated to the ideals embodied in the U.N. Charter. He was also Captain Garland's closest friend, and remained loyal until the bitter end. Only after Garland's death did he reluctantly lead a portion of the crew into one of the escape pods, to attempt the landing on Planet.

fear - and a statement of universal human rights. As such, they support democratic governments, especially those that provide effectively for their people and avoid military aggression. The Peacekeepers believe that they have a crucial role to play in the construction of a just and humane civilization on Planet. They value exploration and scientific discovery as tools toward that end.

Peacekeeper Characters

The Peacekeepers have a well-rounded society, so faction members are likely to have a wide range of skill profiles. Personality types also vary widely, but the faction values "positive" social habits. Many citizens will have Honesty, Pacifism (Self-defense only), or some form of Sense of Duty.

The Peacekeepers have a well-defined hierarchy of Administrative Rank, carried over from the old United Nations system (p. 87). Any citizen who participates in faction government, even at the lowest levels, will hold some level of Rank.

A

In the years after Planetfall, Lal and his followers remained loyal to the colony's charter. They came to regard themselves as the last extension of U.N. authority on Planet. The other factions all failed in some degree to take this ideal seriously, but most of them retained a certain respect for Lal and his people. They soon became known as the "Peacekeepers," in recognition of their tireless efforts to prevent conflict between the factions.

Beliefs

The Peacekeepers exist to support the humanitarian and democratic ideals of Earth's U.N.. They believe in the so-called "Four Freedoms" - freedom of speech, freedom of worship, freedom from want, freedom from

Relations With Other Factions

The Peacekeepers hope to reunite all the factions into a single human civilization on Planet. They will usually pursue negotiation and compromise for a long time before turning to vendetta to meet their goals. One of the few things that will provoke a violent response from the Peacekeepers is widespread violation of the colonial charter or the Universal Code of Human Rights.

Pravin Lal and his followers are most likely to form partnerships with

democratic factions such as the Gaians, the Free Drones, or (with some distaste for their anarchism) the Data Angels. They are most fiercely opposed to violent regimes and police states, such as the Human Hive and the Spartan Federation.

Strengths

Loyalty to the U.N. Charter and its associated ideals is attractive to intellectuals all over Planet. As a result, Peacekeeper bases tend to attract elite visitors from all the other factions, some of whom immigrate permanently. Respect for Peacekeeper ideals, and Commissioner Lal's experience with diplomacy, also give the faction extra influence once the Planetary Council is assembled.

Peacekeeper society is well managed and stable. As a result, their bases support high populations without overcrowding or harsh conditions. The Peacekeepers are the most balanced faction on Planet, equally effective at exploration, scientific research, and industrial development.

Weaknesses

The Peacekeepers have inherited much of the bureaucracy of Earth's U.N., and this complexity makes them less efficient than other factions in their use of resources and energy. Peacekeeper pacifism is a disadvantage when dealing with aggressive factions. The Peacekeepers are technically able to build effective military forces, but their idealism sometimes leads them to wait too long before doing so.

Lifestyle

The Peacekeepers are dedicated to humane ideals. Their bases are not always wealthy, but they place a high priority on making sure every citizen has sufficient food, clothing, shelter, and access to information. Personal apartments are small but comfortable,

and public spaces are designed for beauty as well as utility.

The Peacekeepers adhere closely to the U.N. colonial charter. They have built a representative government on a traditional model, with a strong elected executive, an extensive civil-service bureaucracy, an elected legislature, and an appointed judiciary. Commissioner Lal usually holds the position of "Governor," but he leaves day-to-day administration in the hands of the faction council and the bureaucracy.

The Peacekeeper government strictly respects all the human rights once recognized by the Earth's U.N. This includes not only political but also *economic* rights: the right to work for a fair wage, the right to organize under labor unions, etc. The emphasis on these rights leads the Peacekeepers to use a great deal of centralized economic planning. Individual citizens may certainly own property and run their own businesses, but they must deal with extensive regulations. This approach is less efficient and prevents the accumulation of extreme wealth, but it also tends to reduce social unrest.

The faction's taste for regulation does not extend to intellectual or cultural life, however. Writers, artists, musicians, philosophers, and scientists all find the faction's bases to be a congenial environment. They are free to work as they choose, and their work is held in high respect. Indeed, true free expression is probably more unbound among the Peacekeepers than in any other faction.



Commissioner Pravin Lal 180 points

Human male; age 54; 5'8", 150 lbs.; brown skin, black hair and beard dusted with white, dark brown eyes. ST 10 [0]; DX 13 [30]; IQ 13 [30]; HT 10 [0].

Speed 5.75; Move 5.

Dodge 5. *Advantages:* Administrative Rank 6 (High Commissioner) [30]; Imperturbable

[10]. *Disadvantages:* Honesty [-10]; Pacifism (Self-defense only) [-15]; Sense of Duty

(All humanity) [-15]. *Quirks:* Considers himself the legitimate Governor of Planet; Idealistic;

Impatient with aggression; Pines for dead wife; Tries to mediate disputes. [-5]

Skills: Administration-16 [8]; Biochemistry-12 [4]; Chemistry-13 [4]; Computer Operation-13 [1]; Diagnosis-17 [8]*; Diplomacy-15 [8]; Driving (Automobile)-12 [1]; Electronics Operation (Medical)-14 [4]; Free Fall-12 [1]; Genetics-13 [8]; History-11 [1]; Leadership-15 [6]; Mathematics-11 [1]; NBC Warfare-12 [1]; Philosophy (Humanism)-17 [12]; Physician-17 [12]; Physiology-13 [4]*; Politics-14 [4]; Psychology-12 [2]; Research-14 [4]; Savoir-Faire-14 [2]; Surgery-17 [20]*; Vacc Suit-12 [1]; Writing-14 [4].

Languages: English-13 [2]; Gujarati-13 [2]; Hindi (native)-13 [0]. * Bought up from Physician default.

Pravin Lal was born to an upper-caste family in Rajkot, India. His education culminated in degrees in philosophy and medicine from Oxford University, after which he returned to India to work as a surgeon for several years. In the aftermath of the Twelve-Minute War of 2036, Lal earned international acclaim for his selfless devotion to victims of radiation burns and fallout poisoning. His experience with the horrors of nuclear war took him into U.N. service. He served in the World Health Organization for many years, finally reaching the post of Assistant Director of the WHO.

When the *Unity* project began, Lal volunteered. He eventually earned the double role of Chief Surgeon on board the starship and U.N. High Commissioner for Alpha Centauri. In the latter capacity, he was intended to be the first governor of the Alpha Centauri colony after Planetfall.

The division of the colonists into factions thwarted the U.N.'s original plans, but many U.N. loyalists chose to follow Lal in the starship's final crisis. Unfortunately, Lal's wife, Pria, was mortally injured in a firefight moments before the final exodus to the escape pods. On Planet, Lal continued to claim legitimate authority over the colony, although he refrained from claiming the title of Governor. He worked tirelessly to make the Alpha Centauri colony a humane venture, and to unify the quarreling factions.

Pravin Lal is a strong idealist, the epitome of the best nature of Earth's world community. He is a democrat and pacifist by nature, and will follow those ideals as far as he possibly can. If he has a tragic flaw, it is his devotion to his own loved ones, which is one of the few things that could cause him to violate his ideals. For example, he used political "pull" to have his wife admitted to the *Unity* crew, despite her mediocre talents as a physician.

Adventure Seed: Ride of the Blue Helmets

Commissioner Pravin Lal has negotiated a fragile cease-fire between two rival factions. Now the U.N. sends the adventurers in as both diplomats and security personnel, to solidify the peace and bring both sides to the bargaining table. The diplomatic assignment is difficult enough, but when the rivals begin shooting at each other again, the Peacekeepers are

Nautilus Pirates

Let the others fight their religious wars and bicker over the scraps of the Unity. At sea, you can face down the elements and win battles worth winning. At sea, you can find treasure the like of which the land-huggers will never know. At sea, you can be free, really free for the first time in your life.

- Captain Ulrik Svensgaard, recruitment speech, Mission Year 2136

Ulrik Svensgaard was the Lead Astrogator aboard the *Unity*. He had little interest in the grand ideals and petty disputes among the other senior officers. He had signed on for adventure, pure and simple, and he was eager to test himself against the unknown conditions on Planet. Unfortunately, it was soon obvious that other factions among the crew would hijack his ambitions, unless he could gather a following of his own. Grimly, he proceeded to do just that.

After Planetfall, Svensgaard and his followers abandoned land as soon as they could, seizing the few water-capable craft that were available from the *Unity*. They built their first bases on offshore islands and in shallow coastal waters, seeking to explore and exploit the vast resources of Planet's oceans. They stayed aloof from the growing vendettas among the land-based factions, although they ruthlessly attacked anyone venturing out to sea without their leave.

Soon they were being called the "Nautilus Pirates," after the chambered-nautilus symbol they had taken as their banner.

Beliefs

The Nautilus Pirates are probably the *least* ideological of all the factions on Planet. They choose to live the seafaring life, believing that Planet's oceans are actually more fit for human habitation than its continents. Aside from this commitment, they have no fixed dogma, simply pursuing the life of adventure and discovery that Captain Svensgaard promised them. The ideological imperatives of other factions amuse

Captain Ulrik Svensgaard

Human male; age 42; 6'2", 208 lbs.; pale skin, long blond hair pulled into a braid, one brown and one white eye.

ST 11 [10]; DX 14 [45]; IQ 13 [30]; HT 11 [10].

Speed 6.25; Move 6.

Advantages: Absolute Direction_L 5; Alertness +2_L 10; Combat Reflexes_{TS} 9; Military Rank 5 (Commander)

Disadvantages: Code of Honor (Pirate's) [-5]; Jealousy [-10]; One Eye [-15]; Overconfidence [-10].

Quirks: Despises the "soft" life on land; Enjoys humbling arrogant land-dwellers; Loyal only to personal relationships. [-3]

Skills: Administration-12 [1]; Astrogation-15 [6]; Astronomy-12 [2]; Bard-13 [2]; Boating-15 [4]; Brawling-15 [2]; Breath Control-10 [1]; Carousing-11 [2]; Cartography-13 [2]; Computer Operation-13 [1]; Cooking-13 [1]; Detect Lies-12 [2]; Electronics Operation (Communications)-12 [1]; Electronics Operation (Sensors)-13 [2]; Electronics Operation (Weapons Systems)-12 [1]; Fast-Talk-12 [1]; First Aid-13 [1]; Fishing-14 [2]; Free Fall-13 [1]; Gunner (Gauss Cannon)-15 [1]*; Guns (Light Automatic)-16 [1]*; Guns (Pistol)-17 [2]*; Guns (Rifle)-16 [1]*; Intelligence Analysis-12 [2]; Intimidation-12 [1]; Knife-13 [1/2]; Leadership-14 [4]; Literature-11 [1]; Mathematics-12 [2]; Mechanic (Small Watercraft)-13 [2]; Meteorology-14 [4]; Navigation-18 [7 1/2]t; Sailor-15 [6]; Savoir-Faire (Military)-13 [1]; Scuba-13 [2]; Seamanship-15 [4]; Shipbuilding-13 [4]; Shiphandling-15 [8]; Strategy (Naval)-12 [2]; Swimming-16 [4]; Tactics (Naval)-13 [4]; Vacc Suit-12[1].

42 FACTIONS

215 points

Languages: English (native)-13 [0].

* Includes +2 for IQ.

f Includes +3 for Absolute Direction. Bought up from Seamanship default.

Ulrik Svensgaard was born in 2018 to working-class parents, his father a fisherman and his mother a bartender in a coastal Massachusetts town. He spent his youth working with his father, but the eternal struggle to make a living from

the increasingly depleted Atlantic fisheries was intolerable to me adventurous Svensgaard. In 2042, he abandoned his family to join the United States Navy

Svensgaard served with distinction during the Pax Decay wars, earning admission to Officer Candidate School and eventually a position as a navigator with the *William Jefferson Clinton battle group*. During the disastrous Battle

of Baffin Bay he exhibited extreme heroism, losing the use of his left eye but receiving a medal and his choice of assignments. He chose to volunteer for the *Unity* project,

and secured a position as the starship's Lead Astrogator. The Pirate leader is a thorough romantic. Since reaching

adulthood, he has modeled himself after great seafarers of history and literature: Magellan, Francis Drake, James

Cook, Wolf Larsen and (perhaps especially) Ragnar Danneskjold. He views his life as a long struggle. Pitting

one heroic man against the elements and the evil of human beings. Strangely, this self-image does not make Svensgaard

overly arrogant. He is supremely self-confident but he is unfailingly polite to his associates and follows a kind of chivalric code even with his enemies. He never fights sim-

f brutality. and his word

(or anger) the Pirates, who are not above raiding the "land-huggers" in order to puncture their pretensions.

Relations With Other Factions

The Pirates are not natural allies of any other faction. They will trade with (or raid) anyone, depending on circumstances. The best way to befriend the Pirates is to trade with them fairly, treat them with respect, and stay on land "where you belong." The quickest way to end up in vendetta with them is to encroach on what they regard as their own domain, the wide oceans of Planet.

Of all the land-bound factions, the Pirates probably coexist most smoothly with the Spartans. Svensgaard and his followers lack the Spartans' grim worldview, but both factions respect personal and factional strength above all.

Strengths

The Pirates are masters of pelagic technology. From the earliest days on Planet, they can colonize and exploit the seas. Their ships are always of higher quality and have better-trained crews than those of other factions. During the first years of the colony, they develop superb small-unit tactics focused on boarding actions, allowing them to capture ships built by other factions.

The Nautilus Pirates also have economic advantages at sea. More so than any other faction, they are adept at extracting resources from the shallow waters of the continental shelves. As well, they are the only faction with the technology to build bases and other facilities in deep-ocean waters.

Weaknesses

The wandering existence of the Nautilus Pirates has certain drawbacks. Much of the faction's economy must be devoted to maintaining their oceanic bases, facilities, and ships. This leaves fewer resources for

Nautilus Pirate Characters

The Pirates' distinctive lifestyle places strict requirements on faction citizens. Most Pirates will put points into some combination of Powerboat, Sailor, Seamanship, Swimming, and possibly even Shiphandling. Even "stay-at-home" citizens who rarely leave faction bases will still go to sea for short trips, and will need to know their way around the water.

The ideal Nautilus Pirate is an individual who lives large. Typical disadvantages include Compulsive Carousing, Compulsive Generosity, Impulsiveness, and Overconfidence. Extreme cases might have Glory Hound or On The Edge. Naturally, Code of Honor (Pirate's) is appropriate for any adventurer. Stay-at-home types will probably have less extreme personalities.

personal goods or industrial production. Further, the rootless Pirates have few children, and have difficulty maintaining stable families when they do. Much of their growth in population comes from recruiting disaffected members of other factions.

Lifestyle

The Nautilus Pirates live without roots, rarely owning permanent homes. Many of them live for years on board ship, relying on long-range communications to stay in touch with friends and family. Others use a series of temporary quarters, moving from one Pirate base to the next to follow their work or their personal relationships. As a result, private quarters in most Pirate bases are small and utilitarian. The faction does place some emphasis on community space, giving its citizens plenty of places to meet and socialize. These include some of the best bars and restaurants on Planet.

Among themselves, the Nautilus Pirates admire adventurism. The ideal Pirate sets high goals for himself, pursues them by any means necessary, and attains them with style and

panache. The tales of such accomplishments play an important role in faction society. The Pirates' preferred art form is the *story*, either set down in print or told over beer in a public place. They hold most other forms of art in contempt, but their narrative literature is the best on Planet.

The Pirates have a political system barely above anarchy. They believe strongly in personal property, at least among themselves (the property of non-Pirates is far less sacred). A ship owner or businessman can run his affairs as he pleases, and his word is law among his employees or dependents. Competition between such figures can be fierce, involving brawls or sabotage as well as legal or economic maneuvering.

The system often seems on the verge of breaking down, but there are factors which prevent competition from getting out of hand. The Pirates have a well-developed *code duello*, so bitter enemies can always resolve their dispute personally before others are forced to suffer. In addition, Captain Svensgaard and his most trusted associates form a semi-formal police force, stepping in with highly trained marines whenever it seems necessary.

Adventure Seed: The Masked Avenger

Whenever a ship owner abuses his crew, whenever someone raids the helpless, he is there. Whenever trouble arises, he comes sailing out of the fog, with the fastest hydrofoil on Planet, a handpicked crew, and a mask concealing his face. No one knows who he is. Can the PCs track down this leg-

The Cult of Planet

Humans were unfortunate enough to evolve on a world in which they comprised the most intelligent and powerful species. Thus the overwhelming arrogance wired into them, to imagine gods in their own image and then discard them when they become inconvenient. That will not be possible here. Make no mistake, Planet itself is a sleeping god, and when it wakes there will be apocalypse.

- Prophet Cha Dawn, "Planet Rising "

Among the early colonists, there were a few whose devotion to environmentalism bordered on insanity. Soon after Planetfall, these "Environmental Malcontents" claimed to have found a human infant alone in the xenofungus, breathing Planet's air without a filter, unharmed by the mind worms that lurked all around. They immediately hailed the infant as their Prophet, claiming that he was a genetic construct created by Planet to speak on its behalf.

The boy Cha Dawn grew to maturity, in both body and mind, with unnatural speed. Within a few years, he was able to function as the charismatic leader of the Malcontents, and was being hailed as their Prophet. At his urging, many of the movement's members fled the established bases for the wilderness, where they became the Planet Cult and laid plans for the eradication of human civilization from the surface of Planet.

Beliefs

The Planet Cult is not a simple environmental movement, but a religion which rejects almost all previous human civilization. Cultists believe that by destroying its homeworld, humanity has forfeited any right to continued existence. If human beings are to survive, then they must throw themselves on the mercy of Planet and hope for its favor. Anyone who fails to do this, and reenacts the crimes of humanity on Earth, must be stopped and punished.

As a religion, the Cult is elaborate and formal. The Planetmind is worshiped as a god. Mind worms and related native life forms are viewed as divine beings in the Planet-god's service, capable of both benevolence and

viciousness. Prophet Cha Dawn is regarded as semi-divine, the direct offspring of Planet by a human woman. The Cult has borrowed some elements from both Christianity and Islam, but is largely a new creation based on the pronouncements of the Prophet.

Relations With Other Factions

The Planet Cult is openly friendly with no other faction, believing itself destined to destroy all traces of human civilization on Planet. The Cult's worldview is closest to that of the Gaians, although this is no guarantee of friendly relations. At times, the Prophet is more hostile toward Deirdre Skye and her followers than toward any other faction. The other factions are at least ignorant, and might one day be brought to understand their natural place. The Gaians *know* what Planet requires of them, and yet they refuse to obey!

Like the Gaians, the Planet Cult is specifically hostile toward the Free Drones and Morganites. They also find themselves in frequent conflict with the Lord's Believers, with each faction considering the other's religion to be an abomination.

Strengths

The Planet Cult is devoted to living in harmony with Planet, to a greater degree than even the most fanatic Gaians. This enables them to blend their activities with the local environment, avoiding all but the worst

Planet Cult Characters

Early instruction, continued throughout a Cultist's lifetime, means that almost every citizen has a working knowledge of basic biology. Any Cultist is likely to have at least a few points in some combination of Botany, Ecology, and Zoology (usually with the "Planet" specialization). As well, most Cultists will have at least a point in Theology, with the optional specialty "Planet Cult." Aside from this, the Cult is a complete society and has use for a wide variety of skills.

Of all the human factions, the Planet Cult has the most ideologically committed population. Most citizens have Sense of Duty (Planet); a substantial minority have Fanaticism. Mind Worm Sympathy (p. 88) occurs more

requently among the Cultists than in any other faction.

mind-worm attacks. Indeed, the Cult is even more effective than Gaia's Stepdaughters at communicating with and "capturing" mind-worm boils.

The Cult's fascination with native life forms has profound effects on Cultist society. Cultist communities normally set aside large areas in which mind worms and other native life can live in close contact with human beings. The Cult often breeds its own mind worms, and its military establishment relies heavily on captive worm boils. The presence of active mind-worm boils in a Cultist community does much to reduce any social unrest.

Weaknesses

The Planet Cult is uninterested in material goods, so members must make do with a bare minimum of equipment and possessions. What industrial production does occur is usually devoted to the military.

Adventure Seed: Your Holiness, May I Borrow Your Hairbrush?

Geneticists in several other factions are *very* interested in Cha Dawn. His apparent defiance of aging, his ability to survive on Planet's surface without life-support equipment, his empathic power - all are traits that other factions would love to engineer into their own populations. The PCs are sent to the Cult's central base in an attempt to get close to the Prophet and steal genetic samples from him.

This adventure need not be played seriously. Imagine what might happen if teams from two (or three, or four ...) rival factions made the attempt at the same time. Meanwhile, the Planet Cult can be played in comic-opera style, with elaborate costumes, quaint local customs, and leering villains.



Prophet Cha Dawn

Human (?) male; age 7; 4'9", 60 lbs.; pale yellow skin, very short black hair, orange eyes. ST 6 [-301; DX 8 [-15]; IQ 13 [30]; HT 8 [-15].

Speed 4.00; Move 4.

Dodge 4. *Advantages:* Charisma +3 [15]; Extra Encumbrance [51];

Fearlessness +2 [41]; Filter Lungs [51]; Mind Worm Sympathy [10]; Religious Rank 6 (Prophet) [30]; Telepathy 5 [25]; Unusual Background ("Child of Planet") [20].

Disadvantages: Fanaticism (Planet Cult) [-15]; Intolerance (Religious) [-10]; Overconfidence [-10]; Unnatural Feature (Orange eyes) [-5].

Quirks: Aggressively confrontational; Enjoys elaborate ceremonies; Ruthless. [-3] *Skills:* Bard-17 [4]*; History-12 [2]; Intimidation-12 [1];

Leadership-18 [6]*; Literature-11 [1]; Meditation-12 [2]; Performance/Ritual (Planet Cult)-13 [21]; Politics-13 [2]; Savoir-Faire-13 [-1]; Survival (Plains)-13 [21]; Tactics-11 [11]; Teaching-14 [4]; Theology (Planet Cult)-13/19 [6]; Writing-12 [1]. *Psi Skills:* Emotion Sense-13 [4]; Telereceive-12 [2];

Telesend-12 [2]; Xenoempathy-14 [6].

Languages: English (native)-13 [0].

* Includes +3 for Charisma.

Cha Dawn was born to a Gaian woman in the midst of one of the first inter-factional battles. His mother was never able to identify the father, and claimed that finding herself pregnant was a complete surprise. She was unable to care for the infant, and abandoned him in a field of xenofungus. Soon afterward,

he was found by some of the Environmental Malcontents, who adopted him as their own.

When Cha Dawn first showed unusual talent as a cult leader, many colonists assumed that the Environmental Malcontents had simply "programmed" the boy to act as a figurehead. Cha Dawn himself claimed that his teachings were dictated to him by the "voices" of Planet. At first, this statement was greeted with ridicule, but then the other factions developed psionic technology and became aware of the dormant Planetmind. In the end, most colonists admitted that the Planet Cult was receiving *some* kind of communication from Planet, but typically speculated that the Prophet was deliberately distorting the content in order to maintain his power over the Cult.

Whatever the true state of affairs, Cha Dawn certainly appears to believe in his own divine nature. His worldview is completely dominated by his awareness of Planet's sacred will, and he appears to have had nothing of a normal childhood. He will stop at nothing to assert his authority over the Cult, or to maintain the Cult's dominance over neighboring factions. He is extremely aggressive in his dealings with other factions, and regards his divine mission as more important than any number of lives.

Cha Dawn is apparently a biological sport, caught permanently in a pre-adolescent stage of physical development. As a result, he has been designed as an adult with low physical attributes, *not* as a child using the rules on p. B14. In any case, neither his own followers nor any other faction treat him as a child.

90 points

Lifestyle

The Planet Cult has the most unusual way of life on Planet. A Cult base is usually a haphazard scatter of buildings, open to the atmosphere, with wide tracts of xenofungus running into the core of the city. The Cultists move about their business, paying no attention to the ever-present mind worms as they writhe along the streets and cling to the buildings. When the worms congregate into a boil, the humans gather to watch in superstitious awe.

Most Cultists lead an austere existence. Living quarters are cramped

and bare of comforts. Clothing tends to be ragged, patched, and filthy. Locally manufactured equipment is serviceable but crude. Only the priesthood enjoys clean, ostentatious garb and luxurious quarters.

The Cult is run as a theocratic state, with the Prophet Cha Dawn as absolute dictator. There is a hierarchy of priests (called "Intercessors") below the Prophet, selected for empathic ability and loyalty to the Prophet's teachings. Other members of the Cult have no civil or political rights, living only to do as they are told. Punishments for dissent run from the painful (flogging) to the horrifying

(being thrown into a brood pit to be devoured by mind worms).

There is very little dissent in the Cult, even concealed. Most Cultists are dedicated to their religion, and would not flee to another faction if they had the chance. This is probably because many of their religious beliefs do not need to be taken on faith. Planet's existence is undeniable, and there is enough evidence of its borderline sentience to convince even non-telepaths. Meanwhile, mind worms make very effective angels of divine retribution.

The Spartan Federation

The tragedy of Earth is not that so many died. Death is an inevitable part of life. The tragedy is that so many died as victims. When the crisis came, they were helpless, unable to use their deaths to buy anything of value. Millions of otherwise intelligent people had been tricked into ignoring a fundamental truth: that no man has any rights if he is unable to personally defend them. — Colonel Corazon Santiago, "Planet: A Survivalist's Guide"

In the 2050s, a survivalist movement called the "Spartan Coalition" rose to prominence in North America. The Spartans had extensive political connections, which they used to discreetly influence the process of crew selection for the *Unity*. As a result, a large number of Coalition members ended up in the crew, including Colonel Corazon Santiago, second-in-command of the ship's Security detachment.

None of this was discovered until late in the journey, when Santiago and her confederates mutinied. Spartans were responsible for much of the damage and many of the crew casualties suffered in the final crisis. In the end, Santiago managed to lead her people to Planet's surface. There, they established the Spartan Federation, and prepared to defend their beliefs against any enemy.

Beliefs

The Spartans have a simple and stark philosophy. They believe that the universe is a hostile place that

takes no notice of human idealism. In the long run, only the strong survive and rule, while the weak can expect only servitude or death. Better to be strong, always ready to fight for one's life or personal ambitions. Anyone who teaches otherwise is an enemy, trying to corrupt the courage and discipline that are humanity's greatest strengths.

The Spartans have a strong warrior ethic that draws inspiration from the great warrior cultures of Earth's past: the original Greek Spartans, the Roman legions, the Masai, the Japanese *samurai*, etc. The ideal Spartan is strong, well trained, utterly disciplined, and ready to die when the fortunes of war turn against him.

Relations With Other Factions

The Spartans are the most aggressive faction on Planet. Their devotion

to factional independence makes them reluctant to ally with others. They *claim* not to be aggressive, but they are in the habit of "discovering" that others are preparing to attack or otherwise take advantage of them. Such discoveries usually lead to Spartan preemptive strikes.

The Spartans have no natural allies, although any faction with sufficient military strength will be able to deal with them as an equal for a time. They are contemptuous of pacifist factions, especially the Peacekeepers and (to a lesser degree) the Gaians. They also despise factions that seek wealth as a primary value, especially the Morganites.

Strengths

The Spartans are by far the best-trained and most motivated soldiers on Planet. They take pride in being able to defeat the enemy even when working at a numerical or technological disadvantage. Their strong discipline also holds during peacetime, reducing social unrest and making their military police units more effective.

The Spartans are no better at scientific research than any other faction, but they do have an uncanny ability to turn any new technology to military use. They push new weapons

systems into mass production, distribute them to soldiers, and combine them with effective tactical doctrine more quickly and more capably than any of their rivals.

Weaknesses

The Spartan devotion to the military draws resources away from other areas of their society. In particular, mining and manufacturing are regarded as work for servants; therefore, Spartan industries are often starved for labor and raw materials.



Lifestyle

As might be expected, the Spartan way of life is harsh and austere. The Spartans practice infanticide, ruthlessly destroying any child who is physically imperfect or shows mental weakness. Children spend most of their time in communal creches, where they receive intensive combat training along with their other education. Adults are assigned to military or paramilitary units, living in barracks. Even pair-bonded couples receive no private quarters until one of them reaches officer status. Until then, they must get permission (or sneak away) if they wish to spend time together or with their children.

Colonel Corazon Santiago

195 points

Human female; age 34; 5'8", 125 lbs.; light brown skin, black hair pulled back in a braid, brown eyes. ST 11 [10]; DX 14 [45]; IQ 13 [30]; HT 11 [10]. Speed 6.25; Move 7. Dodge 7. *Advantages*: Combat Reflexes [15]; High Pain Threshold [10]; Military

Rank 4 (Lieutenant) [20]; Strong Will +1 [4]; Very Fit [15]. *Disadvantages*: Bloodlust [-10]; Code of Honor (Warrior's) [-10]; Overconfidence [-10].

Quirks: Determined to survive at any cost; Obsessive about physical conditioning; Practices extreme self-denial; Proud. [-4] *Skills*: Armoury (Small Arms)-13 [2]; Brawling-17 [8]; Camouflage-13 [1]; Climbing-14 [2]; Computer Operation-13 [1]; Driving (Automobile)-13 [1]; Driving (Heavy Wheeled)-13 [1]; First Aid-13 [1]; Free Fall-13 [1]; Gunner (Machine Gun)-16 [2]*; Guns (Grenade Launcher)-17 [2]*; Guns (Light Automatic)-18 [4]*; Guns (Machine Pistol)-17 [2]*; Jumping-15 [2]; Knife-16 [4]; Knife Throwing-16 [4]; Leadership-14 [4]; Politics-12 [1]; Running-10 [2]; Scrounging-14 [2]; Stealth-14 [2]; Strategy (Land)-11 [1]; Streetwise-14 [4]; Survival (Urban)-13 [2]; Tactics-15 [8]; Throwing-13 [2]; Vacc Suit-12 [1]; Writing-12 [1].

Languages: English-13 [2]; Spanish (native)-13 [0]. * Includes +2 for IQ.

Corazon Santiago was born in Puerto Rico in 2026. When she was still quite young, her family moved to Mexico City, where she was orphaned during a spasm of rioting in 2034. Despite her age, she took her younger siblings and joined a street gang known as the Jade Falcons. She somehow survived the experience, although when she later appeared in California, her siblings had vanished. Santiago never speaks of them, and their fate is unknown. In New Los Angeles, Santiago served as part of a community security force (the NLA Red Panthers) and then joined the City Guard. She distinguished herself as a bat-talion commander when the city imposed martial law in 2050. This service gained her a recommendation to the *Unity* project, which she joined as part of the security detachment.

Unknown to the U.N. selection officials, Santiago was secretly a senior member of the so-called Spartan Federation, a politically influential survivalist group based in the western United States. She used her position within the *Unity* project and her connections in the U.S. government to have a number of Spartans assigned to the *Unity* crew. The result was a survivalist faction within the crew, even before the starship left Earth orbit. Once the *Unity* arrived, the Spartans attempted to seize control of the expedition, setting off the on-board civil war which doomed the starship.

Santiago has a powerful will and practices intense self-discipline. She is adaptable, aggressive, proud, and extremely tenacious. Her personality is one of icy self-control over volcanic rage, the result of her tormented childhood. She will stop at nothing to ensure her own survival and that of her followers. In the end, she has every intention of making herself the absolute ruler of Planet.

Spartan Characters

The Spartan way of life is demanding and sometimes cruel. Any Spartan who survives until adulthood will probably have some level of Brawling, Judo, Karate, Knife, or similar hand-to-hand combat skills. Anyone with a serious physical disadvantage probably acquired it as a battle injury (or managed to remain useful to the faction by developing expertise in a critical skill).

Most Spartan adults hold some level of Military Rank. Social Status among the Spartans is tied to Military Rank in the usual way; that is, one free level of Status for every three levels of Military Rank.

Spartan bases are built and organized as military installations. They are usually kept clean but hard-edged, full of bare metal and stone, with no works of art to soften their austerity. They have few public spaces other than meeting rooms, dining halls, and athletic arenas. Spartan citizens receive uniforms and equipment from the state, and can often carry all of their personal possessions in a small pouch or backpack. Spartans do enjoy entertainments, which usually involve intense athletic competition. They also engage in elaborate military ceremonies designed to instill pride and loyalty to the state.

In theory, the Spartan state is run as a military dictatorship. Every citizen has a rank and a fixed place in the chain of command, and disobedience can be met with harsh punishment. In practice, every command-grade officer

has a personal staff of advisors by way of which ideas and complaints can filter up through the hierarchy. Colonel Santiago has always taught that a good officer listens to her men, and most Spartans have taken that to heart. Spartans often resolve their personal disputes through unarmed or knife duels, which normally go on until one participant is incapacitated



Adventure Seed: Thermopylae

It's the classic war story. The Spartan detachment is alone and outnumbered. Its allies, if any, are poor and unreliable soldiers. The enemy is ready to roll over the Spartan positions and conquer the home bases. Fortunately the Spartans are holding a supremely defensible position - and after all, they are *Spartans*. Can they hold out long enough to save the rest of the faction?

The University of Planet

The phenomenon of man is unique. After a billion years, blind evolution has brought forth the first animal capable of rational inquiry. In us, the universe has finally developed the ability to look back upon itself and transcend the limits of randomness. From this point onward, the fate of the universe will not be a matter of chance, but of conscious choice.

- Academician Prokhor Zakharov, "Now We Are Alone "

In the 2050s, Prokhor Zakharov was perhaps the most renowned scientist on Earth, famous for groundbreaking work in both high-energy physics and artificial intelligence. Within his native Russia, he was a particularly influential figure, adept

at winning support from politicians for his scientific and engineering projects. As such, he was one of the world leaders who first proposed the *Unity* project, and did much to gain massive Russian support for the starship's construction. Zakharov had a

great deal of control over the project from the beginning, and easily won the position of Chief Science Officer. Zakharov also sat on the final crew-selection boards, where he was able to manipulate the process so that a substantial portion of the crew owed their positions to his direct or indirect patronage. This gave him a ready-made group of followers when the starship entered its final crisis. The engineers and many of the scientific crew served him loyally during the attempt to repair the ship, and many of them followed him to

Academician Prokhor Zakharov

Human male; age 66; 5'10", 168 lbs.; pale skin, long, unkempt white hair, brown eyes.

ST 8 [-15]; DX 11 [10]; IQ 15 [60]; HT 10 [0].

Speed 5.25; Move 5. Dodge 5.

Advantages: Gadgeteer [25]; Mathematical Ability [10]; Military Rank 5 (Commander) [25].

Disadvantages: Code of Honor (Scientist's) [-5]; Intolerance (Irrational or superstitious people) [-5]; Reputation -2 (As a manipulative and inhumane scientist; to non-scientists, all the time) [-5]; Stubbornness [-5].

Quirks: Abrasive; Egotist; Enjoys leading and working in a team; Loves tinkering and experimentation; Voluminous writer. [-5]

Skills: Administration-16 [4]; Artificial Intelligence-19 [8]#; Astronomy-15 [4]; Chemistry-15 [4]; Computer Operation-17 [4]; Computer Programming-21 [10]*; Driving (Automobile)-12 [3]&; Driving (Heavy Wheeled)-12 [3]&; Electronics (Computers)-17 [4]t; Electronics Operation (Communications)-16 [4]; Electronics Operation (Computers)-16 [4]; Electronics Operation (Sensors)-16 [4]; Engineer (Combat Engineering)-16 [2]f; Engineer (Fusion Drive)-18 [6] |; FastTalk-14 [1]; First Aid-15 [1]; Free Fall-11 [2]; Guns (Machine Pistol)-13 [1]§; Leadership-15 [2]; Mathematics-20 [8]*; Metallurgy-14 [2]; Nuclear Physics-15 [8]; Photography-14 [1]; Physics-17 [8]; Politics-16 [4]; Research-16 [4]; Savoir-Faire-16 [2]; Scrounging-16 [2]; Shipbuilding (Starship)-17 [6]; Teaching-16 [4]; Vacc Suit-15 [2]; Writing-15 [2].

Languages: English-14 [1]; Russian (native)-15 [0].

* Includes +3 for Mathematical Ability.

t Includes +2 for Mathematical Ability.

§ Includes +2 for IQ.

Bought up from Computer Programming default.

& Bought up from IQ default.

215 points

Prokhor Zakharov was born in the city of Cherskiy, Russia just after the fall of the Soviet Union. His father was a businessman and politician, but early exposure to the corruption of post-Soviet society led the young Zakharov to reject such a "worldly" career. Instead, he pursued an education in the sciences, earning his first degree from the University of Moscow at the age of 18 (largely through Interlink correspondence courses). He then joined the Kolymar Defense Force, where he exhibited exceptional aptitude for physics and engineering.

During the early 2020s, the Russian Far East was the site of civil unrest and border skirmishes with the People's Republic of China. Zakharov served as a combat engineer in these conflicts, earning a reputation for radical innovation under stressful conditions. By the time relative peace was restored in the region, Zakharov had risen to the post of Chief Engineer of the Kolymar Defense Force.

By 2030, Zakharov was in Moscow for a high-ranking research position in the Russian Ministry of Defense. There, he continued his work on advanced engineering, but also became one of the world's leading researchers in computer design and artificial intelligence. It was for this work that he was awarded the Nobel Prize for Information Science in 2044.

Soon afterward, Zakharov joined the U.N. team responsible for developing advanced technology for the newly proposed Alpha Centauri expedition. He did much to promote the *Unity* mission among world leaders, and was largely responsible for the Russians' heavy commitment of resources to the project. A high-ranking U.N. official recommended him unconditionally for the post of Chief Science Officer aboard the starship, although the selection proceedings were mysteriously placed under security lock until several years after launch.

Prokhor Zakharov is probably the greatest scientific genius among the colonists. His personal worldview emphasizes, over all other human values, the quest for knowledge and the ability to adapt and use tools. In particular, he is impatient with "ethical" arguments unless these can be framed in purely logical terms. He is a superb worker as part of a team, but also has a tendency toward ego, which can make him difficult to manage.

Planet. After Planetfall, they founded the University of Planet, continuing to support Zakharov's obsession with ferreting out the secrets of the universe.

Beliefs

The University is devoted to rational, scientific inquiry - with Zakharov defining "rational" and "scientific," of course. Zakharov and his followers value a deep understanding of the physical universe, and the mastery of physical systems that comes from such understanding.

They are impatient with metaphysical philosophy, and have no use at all for spiritual or religious ideas. This approach sometimes causes them to ignore ethical considerations in their pursuit of knowledge.

The University does make some ethical commitments. Intellectual honesty - the ability to argue logically and reach conclusions based only on empirical evidence - is paramount. The University also supports the free flow of information, avoiding secrecy and falsehood at all costs.



Relations With Other Factions

Prokhor Zakharov is primarily interested in being left alone, and will coexist happily with other factions so long as they do not impinge on the University's interests. His best natural ally is probably the Consciousness, which shares the University's devotion to the advancement of knowledge. The University tends to be hostile toward factions that are driven by "religious" ideologies. Enmity with the Lord's Believers is particularly bitter, although Zakharov is also disdainful of the Gaians and the Planet Cult.

Strengths

The University surpasses every other faction at the business of scientific innovation. From the time immediately after Planetfall, they have the best computers, sensors, and laboratory equipment. Their ideology makes them dedicated and honest researchers.

University citizens are also superb engineers, good at putting their scientific discoveries to practical use. They are likely to be talented gadgeteers, improvising engineering solutions to new problems on the fly.

Weaknesses

The University maintains an open society, sharing information freely

Adventure Seed: Paper Chase

A University researcher has some radical theories about Planetary ecology and the nature of the Planetmind. Indeed, if it's still early in colonial history, his radical theory may be that there *is* a Planetmind! Unfortunately, his conclusions smack too much of "mysticism" to suit his superiors, so he has been stalled in his quest for tenure and higher status. In response, he hires a group of assistants to guide him around Planet, pursuing his investigations among other factions and in the wilderness. The assistants' job will be to help their employer prove his theories - and, of course, to, keep him and themselves alive.

University Characters

The University has a diverse society which makes use of a wide variety of skill sets. However, *all* of the faction's children receive rudimentary training in the sciences. Even an ordinary mechanic or laborer is likely to have moderate levels of skills such as Computer Operation, Computer Programming, Mathematics, and Research.

, Elite faction members will often have Code of Honor (Scientist's) (p. 89). Many will have some level of Administrative Rank, tied to free levels of Status (see p. 87). The GM may require any University character with Administrative Rank of 3 or higher to have Tenure (p. CI31).

within the faction and with other factions. This stance is integral to their scientific endeavors, but it can also be a vulnerability. Spies and saboteurs from other factions often have an easy time penetrating University security.

The University's dedication to rational inquiry, even at the cost of ignoring ethics, can often lead to social unrest. This is particularly acute among the University's "underclass": the ordinary citizens who have no scientific talent or duties. Colonists who would be valued members of other factions are considered little more than drones here, and they have all the drone's resentment of their ruling elite.



Lifestyle

The University has established a society centered around the academic culture of old Earth. Senior academicians control the state, setting policy and performing day-to-day adminis-

trative chores. Lesser academicians do most of the teaching and oversight of research. Students do most of the actual work of research. Finally, there is a large class of non-academics who do support work, growing the food, obtaining the resources, and manufacturing and maintaining the equipment needed by the academic elite.

Living spaces in University bases are comfortable but not luxurious. Economic surpluses are normally dedicated to laboratory or manufacturing facilities, not to luxuries for the elite. Even "non-academic" citizens receive sufficient living space, food, and entertainment. Class distinctions in University society tend to be social, not economic (although they are no less strong for that).

The University's government is democratic, but only among the academic class - and there is a strict hierarchy even there. The higher social classes are theoretically open to anyone, but a citizen who wants to reach the rank of full Academician must go through years of strenuous and intellectually demanding work. Candidates must earn advanced degrees, perform well as research and teaching assistants, publish original results, navigate the dangers of academic politics, and earn tenure.

Even an Academician's field of expertise can affect his social standing. Physicists and computer scientists have the most prestige and influence, with pure mathematicians following close behind. Experts in the social sciences are low in the pecking order, and students of the humanities are at the bottom.

Even after learning how to communicate with the Progenitors, the once built throughout this region of

Manifold Caretakers

Flowering : doomed to fail. Failure : horrors unimagined by primitive minds. Caretaker : serve life by preventing Flowering.

- Caretaker Lular H'minee, "Manifold : Service"

human colonists had difficulty glean- ing information about the aliens' cul- ture and history. They never attained more than a superficial understand- ing of the two alien factions which appeared in their midst a few years after Planetfall.

The Manifold Caretakers were eventually discovered to be an off- shoot of one faction in the great civil war among the Progenitors. They represented the conservative strain in Progenitor society, dedicated to the preservation of the various Manifolds

the galaxy. After arriving on Planet, they took up a defensive stance. As long as neither the human intruders nor the Usurper enemy could disrupt Planet's delicate equilibrium, the Caretakers could count themselves victorious.

Beliefs

The Caretakers represent the major- ity faction within Progenitor civiliza- tion. They oppose any innovation or change in the aeons-old patterns of Progenitor culture. In particular, they



forbid any exploitation of the scat- tered Manifold experiments set up by their ancestors. The Caretakers on Planet appear particularly concerned with preventing something called a "Planetary Flowering." They will stop at nothing to prevent the Flowering from taking place, believ- ing that it would have disastrous con- sequences for life throughout the galaxy.

Caretaker Lular H'minee

Progenitor female (?); age 63; 7'5", 260 lbs.; brown chiti- nous integument, deep-set eyes.

ST 18 [-15]; DX 13 [20]; IQ 14 [45]; HT 12 [10].

Speed 6.25; Move 5. Dodge 6.

Advantages: Military Rank 6 (Thrall Commander) [30];

Progenitor (see p. 93) [240]; Strong Will +2 [8].

Disadvantages: Absent-Mindedness [-15]; Disciplines of Faith (Ritualism) [-5]; Fanaticism (Caretaker ideology) [-15]; Sense of Duty (Caretakers) [-10].

Quirks: Curious about humans; Fond of resonance art; Quotes "religious" aphorisms; Uncertain of her own leadership; Wears elaborate ornaments and jewelry. [-5]

Skills: Administration-16 [6]; Appreciate Beauty-12 [2]; Beam Weapons (Laser)-16 [2]*; Biochemistry-13 [4]; Chemistry-14 [4]; Computer Operation-15 [2]; Computer Programming-15 [6]; Diagnosis-18 [8]§; Diplomacy-15 [6]; Driving (Heavy Wheeled)-13 [2]; Electronics Operation (Communications)-15 [4]; Electronics Operation (Medical)-15 [4]; Electronics Operation (Sensors)-15 [4]; Free Fall-13 [2]; Genetics-15 [12]; Intelligence Analysis-14 [4]; Judo-13 [4]; Karate-13 [4]; Leadership-16 [5]#; Mathematics-13 [2]; Philosophy (Caretaker)-15 [6]; Physician-18 [12]; Physics-14 [2]t; Politics-16 [6]; Savoir-Faire-15 [2]; Strategy (Space Combat)-17 [10]; Surgery-15 [8]§; Tactics-16 [8]; Vacc Suit-13 [1].

Languages: Progenitor (native)-14 [0].

* Includes +2 for IQ.

t Includes +1 racial bonus.

§ Bought up from Physician default.

Bought up from ST default.

430 points

It took many years after the Progenitor arrival on Planet for human beings to learn anything of the identity and history of the elusive Caretaker leader. Much of what is recorded here is conjecture based on the most tenuous of clues.

Lular H'minee was born to a high-caste creche on a Progenitor Core World, the one tentatively named "Ursa Prime" by human xenologists. She (assuming the human gender concept is correct) was selected in her youth for training as a counselor, specializing in the intricacies of Caretaker philoso- phy. In accordance with Progenitor practice, she also studied a variety of additional professions. She appears to have what a human would consider professional mastery of fields as diverse as genetics, medicine, and military strategy.

It was this last specialty that brought Lular H'minee into the Caretaker military. The ongoing war against the Usurper fac- tion was entering an intense phase, with skirmishes taking place throughout the Orion Arm of the galaxy. H'minee rose to the command of a scout warship, and was assigned the mis- sion of spying out Usurper plans. After the disastrous attempt at a Flowering on Tau Ceti III, H'minee became aware that the Usurpers were searching for a long-lost Manifold experiment somewhere in the same galactic region. She went in pursuit, and caught up with a Usurper scout ship in the Alpha Centauri system. The subsequent battle stranded Progenitors of both factions on Planet.

Caretaker H'minee appears to be a sane and highly rational being. She is even-tempered and likely to give long consid- eration to any decision. Despite her devotion to the reactionary Caretaker ideology, she is capable of independent and even innovative thought. In particular, she is intrigued by humans and is willing to negotiate with them on occasion, although she still regards them as not-quite-sentient lesser beings.

Caretaker Characters

All Caretakers should have Disciplines of Faith (Ritualism); many have Fanaticism (Caretaker ideology). Their skill base is exceedingly broad, although Caretakers are likely to concentrate on applied rather than theoretical science. Skills such as Computer Operation, Electronics Operation, Engineer, and Mechanic are *much* more common than those such as Computer Programming, Electronics, and Physics.

Progenitors usually make poor PCs, if only because the point cost of the racial template is so high. In most campaigns, their role is that of the "enigmatic alien menace." GMs who wish to use them in this manner might consider *ignoring* precise character design for them, giving Caretaker characters whatever capabilities fit the demands of the plot.

Relations With Other Factions

The Caretakers are not particularly friendly toward any human faction. Even when they agree to a Pact of Brotherhood (see p. 60), it should be understood that they will break the agreement the moment it becomes necessary. The Caretakers are most likely to befriend human factions which are respectful of Planet, especially the Gaians and the Planet Cult.

The Caretakers are implacable enemies of any faction which "exploits" Planet, most notably the Free Drones, the Morganites, and the University. They will also become hostile to any human faction that makes even a superficial agreement with the Usurpers.

Strengths

The Manifold Caretakers are in natural harmony with Planet's ecosystems. They are less likely to provoke mind-worm attacks (indeed, they were surprised to discover, after arriving on Planet, that the mind worms would attack them *at all*). They can make mind-worm captures at once upon arriving on Planet.

The Caretakers do not participate in the "energy economy" of the human factions, and in fact do not engage in trade at all. Instead, they tap extra energy from the manifolds

themselves. As Caretaker bases grow, each facility includes further mechanisms for tapping into this additional energy supply.

The Progenitor "resonance sense" is well-developed as a defensive military art among the Caretakers. The faction's warriors are adept at anticipating any attack and bringing resources to bear against it. Caretaker military units can usually sense the approach of potential enemies at great distances, up to hundreds of miles.

The Caretakers have access to a great deal of information not available to the human colonists. For example, they have a good understanding of Planetary geography as soon as they arrive, having performed an extensive survey from orbit before landing. They are also able to direct their scientific research toward specific goals, since they are *rediscovering* lost technologies rather than moving blindly toward completely new theories.

Weaknesses

The Caretakers are strictly limited in their diplomatic options. They never negotiate with their Usurper enemies, existing in a perpetual state of warfare with them. Once they discover the secrets of human psychology and linguistics, they will speak and negotiate with humans. However, they do not take part in many aspects of human diplomacy, notably the Planetary Council (see p. 66).

The Caretakers do not fall under the U.N. Charter, and human factions will often commit atrocities against them that they would not commit against other humans. Conversely, the Caretakers suffer few diplomatic penalties for committing atrocities against their own enemies, whether human or Usurper. Wars involving the Caretakers often become struggles for bare survival on both sides.

Lifestyle

Human observers have trouble understanding the nuances of Progenitor society. The Caretakers appear to live in a kind of theocratic state, although the focus of their reverence is not a deity or concept of the afterlife. Instead, the Caretakers revere their ancestors and the accomplishments of ancient Progenitor civilization. In the place of priests, they have *counselors* who are expert in history, genealogy, philosophy, and ritual practice. Counselors have the task of helping their fellow citizens act in accordance with the wishes of their ancestors. The Caretaker leader, Lular H'minee, is apparently the most senior of these counselors, holding a position something like a cross between high priestess and prime minister.

The Caretakers have an elaborate code of ritual purity. As far as humans can discern, this code is intended to serve a constant reminder to individual Caretakers of their duties toward society and their ancestors. Every action is preceded by a small ritual observance, rather like a devout human praying briefly before a meal or bedtime. These rituals may be millions of years old, and are thoroughly imprinted on the Progenitor psyche. Indeed, the Caretakers have trouble recognizing beings who do not use them as sentient. This was a serious obstacle to communication in the first meetings between humans and Caretakers.



Manifold Usurpers

Human : galaxy appears empty of life. Progenitor : life takes shape in every favorable environment. Life : mind. Mind : evolution toward Flowering. Secret : Progenitors prevent Flowering by preventing mind. Usurper: question wisdom and rightness of such strategy.

— Conqueror Judaa Marr, "Courage : To Question"

The Manifold Usurpers represent the other faction in the Progenitor civil war. Theirs was a rebel faction, bent on breaking free from the aeons-long stasis of Progenitor civilization. While the Caretakers fought to protect the Manifold experiments, the Usurpers demanded the right to exploit them. Their goal was participation in a "Planetary Flowering," a transformation that would grant them a kind of godhood. After their landing, they began an aggressive program of exploiting Planet's resources. They also assumed a highly aggressive stance, refusing to share Planet with their Caretaker rivals or with any human "infestation."

Beliefs

The Usurpers are radical individualists who believe that Progenitor civilization has failed to benefit its citizens as they deserve. They believe that every sentient being has a right to as much life, knowledge, wealth, power, and pleasure as he can seize from the universe. If civilization exists to restrain its most powerful members, then civilization is something to be rejected - or destroyed, if need be.

The core value of Usurper society is *questioning*. The faction questions all received wisdom, demanding justification for the controls imposed upon Progenitors by their society. When a satisfactory answer fails to appear, they demand that the controls be abandoned, to allow the individual Progenitor to seek out his own destiny. This course is one that requires great courage within Progenitor society, where all such questioning has long since been bred out of the species. As a result, the Usurpers emphasize a warrior ethic, which pits the brave fighter against both physical and philosophical foes.

Relations With Other Factions

Judaa Marr and his Usurpers are completely uninterested in coexistence with humanity. If they attempt an agreement of any kind, it will be to seize a temporary advantage, after which the alliance will be broken at a moment's notice. Naturally, any human faction that makes even a trivial agreement with the Caretakers will earn Marr's wrath.

Strengths

The Manifold Usurpers are a race of warriors. They deliberately violate ancient restrictions on breeding, filling their birth-creches with offspring as quickly as possible. These young are bred for war using a variety of genetic and psychological techniques. The net result is fast-growing bases and large, well-trained armies.

Like their Caretaker rivals, the Usurpers do not participate in trade or the "energy economy." Their primary energy source derives from manifold technology, tapping the fundamental energy structures of the universe for power.

The Usurpers share the Progenitor "resonance sense," and have applied it to their military science. Instead of concentrating on defensive awareness, as the Caretakers do, the Usurpers hone their powers for the attack. Their military units are superb ambushers, invariably seeking out weak points in a potential enemy's formation and driving their attack home. Usurper military units have the usual Progenitor ability to sense

Usurper Characters

Usurpers have a wide skill base, but they tend to specialize in combat skills. Almost every Usurper will be expert with Beam Weapons, Guns, and Knife, and will have some skill in Tactics. Usurpers share the Caretaker tendency toward the applied sciences, but in them it is less pronounced - the faction includes a few genuine innovators. Such individuals are likely to have bought off some of the Progenitor racial disadvantages, notably Hidebound and Incurious.

Almost all Usurpers hold some level of Military Rank, and Status within their society is tied to such Rank. Most Usurpers have a Duty to their faction, and many of them have Sense of Duty (Usurpers) or Fanaticism (Usurper ideology) as well.

Manifold Usurpers make even worse PCs than their Caretaker enemies. Again, the GM may wish to avoid precise character design when developing Usurper characters as adversaries.

the approach of potential enemies at long range.

Like the Caretakers, the Usurpers have access to extensive orbital survey data on Planet, dating from just before their landing. They also share the ability to direct scientific research toward specific, known goals.

Weaknesses

The Usurpers are strictly limited in their diplomatic options. They never negotiate with their Caretaker enemies. They can speak and negotiate with humans, but they do not take part in the Planetary Council (see p. 66) or other aspects of human diplomacy.

Conqueror Judaa Marr

Progenitor male (?); age*70; 8', 297 lbs.; pale chitinous integument, deep-set eyes.

ST 23 [30]; DX 13 [20]; IQ 12 [20]; HT 13 [20].

Speed 6.50; Move 5. Dodge 7.

Advantages: Combat Reflexes [15]; Military Rank 6 (Thrall Commander) [30]; No Hidebound [5]; Progenitor (see p. 93) [240]; Reputation +2 (As a fierce and cunning warrior; among Progenitors, all the time) [5].

Disadvantages: Bloodlust [-10]; Overconfidence [-10].

Quirks: Collects battle trophies; Dogmatic "atheist"; Insists on his title of "Conqueror"; Leads from the front; Regards human beings as non-sentient vermin. [-5]

Skills: Administration-12 [2]; Armoury (Gauss Weapons)-12 [2]; Armoury (Laser Weapons)-12 [2]; Beam Weapons (Laser)-18 [8]*; Brawling-15 [4]; Camouflage-13 [2]; Computer Operation-13 [2]; Demolition-12 [2]; Engineer (Combat Engineering)-12 [4]; First Aid-13 [2]; Free Fall-13 [2]; Gunner (Gauss Cannon)-16* [4]; Gunner (Beams)-16 [4]*; Guns (Gauss Weapons)-16 [2]*; Guns (Light Automatic)-16 [2]*; Hiking-12 [1]; History-12 [4]; Intelligence Analysis-13 [6]; Interrogation-13 [4]; Intimidation-17 [4]§; Knife-14 [2]; Knife Throwing-14 [2]; Leadership-17 [4]§; Literature-11 [2]; Mathematics-11 [2]; Orienteering-12 [2]; Physics-12 [2]; Piloting (High-Performance Airplane)-14 [4]; Piloting (High-Performance Spacecraft)-13 [2]; Politics-12 [2]; Psychology-11 [2]; Savoir-Faire (Military)-14 [4]; Scrounging-13 [2]; Stealth-13 [2]; Strategy (Land Combat)-14 [4]#; Strategy (Space Combat)-16 [8]#; Tactics-18 [16]; Throwing-13 [4]; Two-Handed Axe/Mace-14 [4]; Vacc Suit-12 [2].

Languages: Progenitor (native)-12 [0].

* Includes +2 for IQ.

f Includes +1 racial bonus. § Bought up from ST default.

Bought up from Tactics default.

495 points

To humans, Judaa Marr is even more enigmatic than his Caretaker rival. His very identity was unknown for many years after his arrival on Planet. He apparently never participated directly in the rare negotiations between Usurpers and humans, leaving all such matters to his subordinates. Most of what is known about him comes from captured Progenitor archives.

Judaa Marr was born on the Progenitor Rim World closest to Earth: Tau Ceti III. Not long before his birth, the Usurper faction had seized control of the planetary government and begun an aggressive program of industrial and technological development. The goal was a Planetary Flowering that would grant the Usurpers godlike powers - but something went horribly wrong. Even before the Caretakers sent a battle fleet to put down the rebellion, the Flowering got out of hand. During the final space battle for control of the Tau Ceti system, a holocaust erupted on the planet, destroying almost all life.

By this time, Judaa Marr had reached the rank of Thrall Commander and was in command of a Usurper scout ship. After several years of hiding and evasion up and down the Orion Arm, he led his ship back to the region of his homeworld in search of the legendary Sixth Manifold. Once the Manifold was located, he swore that he would lead an armada of Usurpers to take control of the ancient experiment, repeating the attempt at a Flowering.

As it happened, Marr was caught by a Caretaker ship soon after entering the Alpha Centauri system. In the subsequent battle, he and his surviving followers were stranded on Planet. Their mission remained the same, however: to win transcendence for their people.

Judaa Marr is a fierce and cunning warrior, feared even by his own followers. His title of "Conqueror" apparently denotes a high position within the galactic Usurper hierarchy, and he insists on the use of that title by all who deal with him. His individualism and pride make him more humanlike than most Progenitors, although he has nothing but contempt for humans. If he decides to do away with a human rival, then the vendetta will continue until either he or the humans are eradicated.

The Usurpers do not fall under the U.N. Charter, and are subject to atrocities from both the Caretakers and from human factions. Conversely, the Usurpers suffer no serious diplomatic penalties for committing atrocities against their own enemies.

Lifestyle

Of the two Progenitor factions, the Manifold Usurpers have an ideology and a lifestyle that is more recognizable to human beings. This is ironic, since the Usurpers are far more

contemptuous and hostile toward humanity. The Usurpers have thrown off many aspects of traditional Progenitor culture. They have no counselors to help them adhere to ancient traditions, and they ignore most of the ritualism that permeates Caretaker society. Instead, they act as independent beings, competing for power and status by any means that come to hand.

The central institution of Usurper society is the military. All Usurpers receive combat training, and can form a tenacious militia when needed.

Full-time soldiers enjoy additional status, and officers and senior veterans occupy almost all high-status positions. The military does not control every aspect of society, but a faction member will have grave difficulty pursuing his own economic or cultural goals without dealing with the military.

4. The Road to Transcendence

Technology conditions society. The range of possible human activities, as set by the state of technical progress, always serves to define what form society can take. The danger is that such progress may permit or even require society to assume an unhealthy form. What does it profit a man if he masters the physical universe, but in so doing loses his soul?

– Commissioner Pravin Lal, “A Social History of Planet”

The *Unity* expedition was a product of early interstellar-era technology (in *GURPS* terms, late TL8 with some experimental TL9 items). Had the journey ended as planned, the colonists would have been able to establish a new civilization at this technology level right away. Unfortunately, the disaster that struck the starship forced the colonists to escape without most of the equipment they would have needed. As a result, they had many individual items of TL8 manufacture, but were often unable to maintain that equipment or build more. In some ways, the colonists were forced back over 200 years in development. Many technologies that were well known *in theory* were suddenly out of reach *in practice*, and had to be reconstructed through painstaking research and development.

In order to survive and grow, then, the colonists were forced to initiate extensive R&D programs from the very beginning. In some ways, this process recapitulated the development of technology on Earth; however, the unique circumstances of Planet led to a number of changes. Many technologies had to wait until the colony's development had

advanced far enough to make them worthwhile. Some technologies were developed in a different order than had been done on Earth - and other discoveries were wholly new. In the end, human civilization on Planet was qualitatively different from any that had appeared on Earth, the product of a new technical base.

Technology Paths

Later historians identified several dozen specific technological developments which had significant impact on colonial society. One popular model divided these technologies into four categories, each associated with one of the fundamental activities of colonial society: exploration, discovery, building, and conquest. Within each category, historians identified a natural progression from early to late technologies, and gave the developments numeric labels to fit. Naturally, there were disputes over how to classify each development, but the overall scheme seemed to work well, and many other historians adopted it.

Tech Levels

In the *Alpha Centauri* computer game, each player performs research by moving through a *technology tree*. Each of the dozens of available technologies (many of which are named later in this chapter) can only be researched in sequence, after up to two earlier prerequisites have been developed. The result is a complete game within the game, forcing players to plan carefully in search of the most critical new technologies.

Rather than recapitulate the entire technology tree, *GURPS Alpha Centauri* makes a minor extension to the standard *GURPS* tech level system (pp. B185-186). For TL8 and above, each specific item of technology will be assigned to one of the four sectors of technical development: Explore (E), Discover (D), Build (B), and Conquer (C). When it is necessary to discuss a specific subset of a tech level's goods and equipment, this will be indicated by placing the appropriate key letter in parentheses. For example, an item of equipment which is associated with Explore technology at TL9 would be listed as being TL9(E).

Items which are available to the colonists from the moment of Planetfall are always TL8, and will be designated TL8(P).

Setting Faction Technology

When designing a *GURPS Alpha Centauri* campaign, the GM should decide what level of technology is available in all four categories to all factions. For example, in a Planetfall campaign, all factions will be restricted to TL8(P), but campaigns set in later years might have a base TL of 9, 10, or higher.

Once the base TL is chosen, the GM can assume that each faction has made further progress in certain areas. Members of a faction may have access to some items one TL higher than the base, as long as they are within that faction's areas of specialization. Naturally, factions with one area of specialization are more likely to have advanced items in that category than factions with two specialties. The most likely areas of specialization for the canonical factions are:

Faction Technology Specializations

Faction	Specializations
Cult of Planet	Explore, Conquer
Cybernetic Consciousness	Explore, Discover
Data Angels	Discover, Build
Free Drones	Build, Conquer
Gaia's Stepdaughters	Explore
Human Hive	Build, Conquer
Lord's Believers	Explore, Conquer
Manifold Caretakers	Explore, Conquer
Manifold Usurpers	Build, Conquer
Morgan Industries	Build
Nautilus Pirates	Explore, Conquer
Peacekeeping Forces	Explore, Discover
Spartan Federation	Discover, Conquer
University of Planet	Discover

For example, suppose the GM selects TL9 as the base TL for the campaign. Gaia's Stepdaughters are likely to have at least *some* items from TL10(E). The GM may decide that other items from TL10(E) are not yet available even to the Gaians, but these are likely to be developed soon (possibly in the course of the campaign).

Secret Projects

The *Alpha Centauri* computer game allows each faction to build certain colossal, one-of-a-kind items: the "Secret Projects." Each Project, once completed, gives its owner a special advantage that is available to no other faction. Only one of each Project can exist, so once one faction builds a given Project, no other faction may do so. On the other hand, Projects can be captured in war, in which case the advantages they confer change hands.

In *GURPS Alpha Centauri*, we assume that each Project actually represents a concerted effort on the part of one faction to organize its society in a specific way. Each Project requires massive investment in industrial production and social regimentation, and is unlikely to be duplicated by any other faction (hence the Projects' uniqueness). We also assume that a faction that conquers another will be able to take advantage of the victim's particular talents (hence the manner in which Projects can be captured).

We will *not* always assume that a given Project is located in a specific base, as the computer game does - instead, the effects of a completed Project are felt throughout a faction's territory and by all of its citizens. When describing each Project, we will not specify which faction eventually built it. That will be left up to the individual GM, as one way of customizing his campaign.

Note that in the *Alpha Centauri* setting, technology affects not only the gadgets to which adventurers have access, but also the social circumstances in which they operate. Once the GM has decided what

technology is available to each faction, he should read the appropriate sections of this chapter carefully to gain insight into the social trends that will hold in his campaign.

sites, identifying the most obvious

Bare Essentials (TL8: Mission Years 2100-2180)

Let's get to work.

- Slogan attributed to CEO Nwabudike Morgan, c. MY 2100

In the beginning, the colonists were less concerned with grand ideological conflicts than with simple existence. Technical research and social development were directed toward the basic tasks of survival on Planet. Life was hard during this era, with each faction struggling to build a viable, self-sufficient settlement before the equipment and stores from Planetfall were depleted.

Exploration

Immediately after Planetfall, exploration was the first order of business. Teams of scientists went out into the terrain around the landing

dangers and resource opportunities. The local geology, biology, and ecology were all significantly different than expected, and required considerable study to understand.

Centauri Ecology (Explore 1)

Eventually, follow-up teams began to lay out agricultural areas, build mines, and set up solar collectors. These early efforts soon led to organized "terraformer" (or "former") detachments. Former companies often spent months or even years out in the countryside, performing the large-scale engineering that kept

resources flowing into the bases. Terraformers were stubbornly independent, remaining aloof from the ideological squabbles of the colonists back at base. They would fight in their own defense, but they hated war and violence. After all, both the terraformers and the infrastructure they sweated blood to build were usually the first targets when mind worms or hostile humans attacked.

Doctrine: Mobility (Explore 1)

As the colonists tentatively explored Planet, they came into contact with hostile forms of native life. Some factions took an active approach to defense, placing the few available speeders on scout duty. Moving quickly through the surrounding countryside, these teams located coalescing mind-worm boils and mounted preemptive attacks, thereby keeping danger away from vulnerable bases. Soon, speeder companies formed the basis for the first military institutions on Planet. They developed a formal doctrine of *mobility* that emphasized speed, discipline, and devotion to duty.

Progenitor Psych (Explore 1)

Early contacts with the Progenitors invariably failed. Not only could neither race understand the other's language, neither could even understand the physical basis of the other's form of communication. Soon after the alien arrival on Planet, however, one Progenitor broke away from its people and came to live with and instruct a human faction. The result was the first working knowledge of Progenitor psychology and linguistics, allowing humans to express themselves in terms the aliens could understand.

If the Progenitors are an active presence in the campaign, then this development permits the design of the Progenitor translator (p. 73). An encounter and interaction with a renegade Progenitor is a likely adventure seed for a faction developing this technology.

Doctrine: Flexibility (Explore 2)

Naturally, most early exploration was on land. However, some factions that were initially located in coastal regions extended this to the shallow waters of Planet's continental shelves. There, they found that the oceans were rich with edible plant and animal life. Long before the first ocean-crossing voyages, *aquafarms* were the first step in the development of Planet's seas.



Later, some military officers concluded that the doctrine of mobility was inadequate to defend base areas. They proposed an additional doctrine, that of *flexibility*, intended to incorporate additional modes of transportation. In particular, water transport allowed troops to be moved more quickly to trouble areas. The first combat ships (fast coastal hydrofoils) permitted the principle of active defense to be applied to seaborne as

well as land-bound threats. Shallow-water harbors for these ships eventually formed the basis for offshore bases, using sea walls and pressure domes. The new military doctrine opened the door to versatile use of the sea, an ongoing theme in humanity's history on Planet.

Ethical Calculus (Explore 2)

As sociologists and community leaders worked with the mathematical principles of Social Psych (p. 59), they found ways to apply them to age-old ethical questions. The eventual result was a set of mathematical formulae that allowed the determination of appropriate human behavior, given certain assumptions about the overall goals of society. This "ethical calculus" was imperfect and not universally accepted, but it provided a useful tool for building stable societies in the early settlements.

For some of the effects of the ethical calculus, see the discussion of Philosophy skill on p. 90. This development also permits the Democratic social choice (p. 124).

Discovery

The first colonists explored the surface of Planet, but they also engaged in basic scientific research. Much of the cutting-edge science and technology once known on Earth was lost in the crisis of Planetfall, and had to be laboriously reconstructed.

Weather Paradigm

In the first years after Planetfall, every faction devoted resources to exploration and evolved its own version of Centauri ecology. Most of the factions treated Planet as a resource to be exploited in the desperate quest for survival. However, one faction's citizens had the foresight (or the ideological stubbornness) to take a different approach. They followed the ideal of the so-called "Weather Paradigm," treating Planet as a source of mystery and enlightenment. They chose to submit to Planet, thoroughly understanding local ecosystems before taking any action that might disrupt them.

This minimalist strategy cost the faction a great deal in the short term, as resources badly needed for immediate survival were devoted instead to exploration and research. Still, the Weather Paradigm brought immense benefits in the long run. The faction's deep understanding of Planet and its systems greatly multiplied the effectiveness of its terraformer teams.

Biogenetics (Discover 1)

The exposure of humans and other Earth life to the conditions on Planet led to all manner of new and unexpected health problems. Strange viral and genetic diseases attacked the earliest colonists, threatening the very survival of humanity on Planet. Genetic research was therefore not a luxury, but a necessity. One result was a series of bacterial and algal cultures that could be applied to the task of recycling Terran biomass and maintaining life support. Each base soon had a set of recycling tanks, improving the efficiency of resource use.

Human Genome Project

With the development of biogenetics, all factions invested in research to fight the scourge of genetic disease. One faction went so far as to reconstruct the Human Genome Project once mounted on Earth, with special attention to the ways in which human genetics interacted with the new conditions on Planet. The project required considerable dedication, but in the end it led to significantly better health for that faction's population.

Information Networks (Discover 1)

The first colonists were handicapped by a lack of data-processing power when performing scientific research. The computer cores from the *Unity* were lost and could not be replaced. On the other hand, many items of personal equipment contained dedicated computers, and many small "personal" computers had been salvaged. Experts worked to reprogram these computers, turning them to a wider variety of applications and linking them into base-wide networks. Once this was accomplished, scientists and researchers had the computer power they needed to tackle the colony's immediate problems.

Planetary Networks (Discover 2)

Once the colonists managed to build basic digital networks and begin the manufacture of new computer equipment, further developments in information science were

rapid. Standards and protocols were developed for faction-wide networks, and then for networks that bridged faction boundaries. Clumsy keyboard terminals gave way to smooth, natural-language interfaces and hologram output. Much of this was a redevelopment of techniques that had been lost with Earth, but it had a distinctively Planet-born flavor.

In *GURPS Alpha Centauri*, assume that a faction with information networks (early TL8) has only built small networks of less-powerful computers. However, a faction with planetary networks (late TL8) will have extensive computer webs tying

together all of its bases and facilities. Computer intrusion or "hacking" will become an issue for a faction only after it develops planetary networks. This technology also allows the Planned social choice (p. 124).

Polymorphic Software (Discover 2)

Finally, the colonists redeveloped massive neural nets, similar to those which had been in use on Earth. These computer architectures could (in limited fashion) learn and adapt to changing circumstances, making them the first step in the development of true artificial intelligence.

Polymorphic software permits computers to be built with the "neural net" option (p. 101). Mainframe computers reach Complexity 5 at the same time.

Secrets of the Human Brain (Discover 2)

No one, not even the planners of the *Unity* mission, expected the colonists to achieve true breakthroughs in the sciences. They were few in number, far from home, cut off from the resources of Earth, and even further handicapped by their division into factions. It came as a surprise, then, when despite these conditions, the colonists managed a discovery that had eluded all of Earth's scientists for centuries. Building on the discoveries in genetics and artificial intelligence, one faction located the biological mechanism behind self-awareness itself.

Virtual World

As the colonists developed planetary networks, not all of the applications involved scientific research or economic planning. Another result was the return of VR entertainment. Once common on Earth, the virtual arts had been lost with the *Unity*. Now each faction could build hologram theaters for both training and entertainment, boosting colonist morale.

For most factions, the virtual arts were a side issue, a means of providing casual entertainment or realistically simulated training for their citizens. One faction went so far as to turn its new computer network to the production of a Virtual World, a whole sheaf of carefully developed, engrossing virtual realities. An extensive VR studio in one base created the Virtual World's content and maintained its infrastructure. Any citizen with access to the faction's computer network could tap into the Virtual World, whether in a hologram theater or in the privacy of his own home. The result was a significant reduction in social unrest, as the colonists (especially the drones) buried themselves in VR entertainment.

In *GURPS Alpha Centauri*, VR technology (p. 104) will only become widespread once one of the factions has built the Virtual World. Before then, VR interfaces will be uncommon and expensive.

At first, the new theory of consciousness was regarded as a scientific curiosity. Self-awareness was certainly interesting, but it didn't appear to *do* anything, to serve any specific function or grant any evolutionary advantage. Soon, however, the theory opened the door to the study of *psionics*, an entirely new science critical to human survival on Planet. Long derided on Earth as mythical, psi effects were demonstrated to be real and controllable.

The first benefit of the new science was a method for inducing a kind of post-hypnotic trance in front-line soldiers. They could still react intelligently in combat, but their altered state of consciousness made them less vulnerable to the mind-twisting attack of mind-worm boils. In *GURPS* terms, this is represented by the ability to acquire Telepathy Power and learn the Mind Shield skill (p. 91).

This development also allows the Fundamentalist social choice (p. 124).

Building

The first colonists had what they could salvage from the wreckage of the *Unity* escape pods, and little more. If civilization were to be rebuilt on Planet, then it would require a rebirth of industrial methods. It would also require new social forms, unlike any that had been seen on the mother world.

Industrial Base (Build 1)

Survival on Planet required that the colonists find a way to replace equipment that was damaged or worn. Unfortunately, almost all of the heavy automated machinery once stored on *Unity* was lost. Most of the early bases responded by developing labor-intensive methods. Farmers planted fields by hand and harvested crops with simple tools. Miners gathered and smelted ores using ancient techniques. Engineers built machine tools by hand, out of salvaged or mined material. Parts were made and assembled into useful equipment

Merchant Exchange

In the earliest days, "trade" was a foreign idea to the surviving colonists. Equipment was effectively held in common, and given to whoever was best suited to use it in the fight for survival. Once the immediate struggle was over, the colonists began to reassert concepts of ownership and formal resource allocation. Most of the early bases did this by using plain barter for all exchanges.

Once the colonists had built an industrial base, it became possible to go beyond this simple arrangement. One faction's home base was within reasonable travel distance of several others. A few would-be entrepreneurs took advantage of this fact by trading needed items among the nearby communities. Soon, a formal commodities market appeared, dealing in salvaged equipment, newly manufactured items, and even a few small luxuries.

This Merchant Exchange was a popular place to do business from the very first years on Planet. Over the following centuries, it grew to become Planet's primary financial center, bringing its sponsoring faction considerable wealth.

The Energy Economy

The importance of the Merchant Exchange increased dramatically when its sponsoring faction developed a method for manufacturing new rechargeable power cells, a feat which had so far eluded the colonists. Suddenly, transportable energy was no longer a commodity in critically short supply.

Energy stored in power cells was critical to all activity, relatively scarce, easily transported, easily measured with precision, and difficult to counterfeit. All of these were qualities useful for a *medium of exchange*. Before long, charged power cells were also serving as the basic *standard of value*. Over the course of Planetary history, various forms of currency were used by the different factions, but whether metal coins, printed plastic bills, or digital codes, all were backed up by the promise to deliver usable energy on demand. The result was the "energy economy" which eventually became the backbone of Planetary civilization.

In the end, the energy economy lasted only a few decades in its pure form. As faction economies became more elaborate and global trade expanded, the idea of *money* became as abstract as it had once been on Earth. For the rest of colonial history, the factions continued to measure wealth in terms of kilojoules and megajoules - but by about Mission Year 2150, each faction's currency was backed by a wide variety of commodities, or by credit alone.

using informal assembly line methods. However, a few factions were able to salvage manufacturing equipment from the *Unity* and gain an early advantage in industrial development.

This development permits the production of non-rechargeable power cells and monocrys armor (p. 99).

Social Psych (Build 1)

The colonists had experienced terrible overcrowding and stress aboard the *Unity*. After Planetfall, harsh conditions continued, and society some times seemed ready to break down

under the strain. On the other hand, sociologists had a priceless opportunity to gain a deeper understanding of human social dynamics. For the first time, they were able to define a rigorous mathematical model for simple or self-contained human societies: the "Social Psych" theory. Using Social Psych, architects were able to design homes and public areas capable of supporting the human psyche even under conditions of crowding and limited resources. Every faction developed its own distinctive style of "recreation commons" as one of the first expressions of its fundamental ideology.

Diplomatic Conventions

As the widely separated colonist groups went about their business, they came to think of themselves more and more as independent societies. Once they began to come back into contact with one another, there was a constant tension between two ideals. On the one hand, there was the ideal of cooperation, as embodied in the original colonial charter. On the other hand, there was a fierce desire for continued factional independence. Out of this tension grew the basic conventions of Planetary diplomacy.

Contact Protocols

At first, the various factions were unable to communicate at all. Radio equipment imported on the *Unity* was useless over medium to long ranges (later investigation showed that the world-girdling fungal mats generated electromagnetic interference). As the colonists experimented with countermeasures, they discovered the hard way that narrow-band radio transmissions often attracted angry mind-worm boils.

The initial solution was to "scramble" transmissions so that they blended into the EM background. Each faction independently developed its own techniques for accomplishing this. As a result, before two factions could communicate, they were usually required to come into physical contact so that they could share these commlink protocols. Some factions, physically isolated from the others by geography, remained out of touch for years or even decades after Planetfall.

Once two factions were in contact, their leaders could communicate at will. This led to formal negotiations over territory, resource sharing, exchange of scientific data, etc. Sometimes, even the ability to communicate with third parties became an item for negotiations, with one faction offering another the commlink protocols of a third faction in exchange for some favor.

Relationships

At first, the factions remained at peace with one another, too widely separated and too busy with mere survival to come into conflict. Later, this state of watchful peace became known as "truce," because it normally indicated that the two sides were simply building their strength for another round of combat. A formal "treaty of friendship" was a firmer arrangement, in which the two factions agreed to respect established boundaries and carry on open trade. Finally, two factions might agree to a "Pact of Brotherhood," a state of full military, political, and economic cooperation. Pact Brothers agreed to share all exploratory data, provide bases for each other's military units, and otherwise support one another when conflicts arose.

Oddly, the colonists rarely spoke openly of *war*. When military units of two or more factions were exchanging fire, it was called a "feud" or (more often) a "vendetta." This may have been a residual effect of the pacifist ideals of the U.N., backed by a desire among even the most militant factions to disassociate themselves from the massive wars that had wrecked Earth. Of course, on Planet, even the largest vendettas never reached the scale of mass warfare. They also retained an element of personal struggle that had long since been lost on Earth.

Industrial Economics (Build 2)

Once the colonists redeveloped the capacity to manufacture rechargeable power cells, industrial growth accelerated. This forced faction leaders to develop new economic theories to

coordinate industrial activity. Formal systems of banking and finance soon followed.

In *GURPS Alpha Centauri*, this is the critical development for the production of *rechargeable* power cells. It also permits the Free Market social choice (p. 124).

Conquest

The *Unity* crew was deliberately not equipped with the advanced weapons that were common on Earth before the launch. The mission was conceived of as one of peace, so the crew was armed only with standard U.N.-issue side arms. Unfortunately, these "shredder" weapons proved almost useless against native life forms or hostile colonists. New weapons and defensive systems had to be developed, and quickly.

Applied Physics (Conquer 1)

One early technical effort produced "flame guns" for use against mind worms and xenofungal blooms. Another was directed toward the adjustment of various laser-powered tools for military use. Soon, some of the first assembly lines were dedicated to the production of actual laser weapons.

Doctrine: Loyalty (Conquer 2)

As time moved on, the need for defense grew, with not only mind-worm boils but also rival factions as potential adversaries. Some young military leaders responded by reinventing the warrior ethic and applying it to the situation on Planet. They proposed a formal doctrine of *loyalty*, which called for the formation of a permanent warrior class. Members of this class were subject to intensive military training, and were expected to give absolute loyalty to faction leaders. In return, they gained higher status and respect within colonial society.

In some factions, this doctrine was extended to all of society, forcing all colonists to follow the same code of absolute obedience. Such factions used the Police State social choice (p. 124).

The Arms Race

Several developments classified by historians as "Conquer 2" led to an early arms race on Planet.

First, the rediscovery of high-energy chemistry led to the invention of new materials useful in the manufacture of armor capable of resisting

Command Nexus

As the doctrine of loyalty was accepted, military infrastructure grew everywhere on Planet. Base defenses became more elaborate, designed to keep out both human and native attackers. Command posts, once built to coordinate the activities of speeder-borne scouts, now became formal military headquarters. Officer staff expanded, and acquired extensive computer support. Still, even with the growth of military institutions, most factions left defense in the hands of local base leaders. Each base raised its own military units, and (at least when the faction was not in vendetta) commanded them independently.

One faction, more dedicated to its military than the others, went beyond this piecemeal approach. It constructed a permanent Command Nexus in one base, placing all of its military and intelligence-gathering activities under centralized control. Cutting-edge computer and communications technology allowed the faction's leaders to manage their military units anywhere on Planet.

In *GURPS Alpha Centauri*, the Command Nexus can represent a major Patron for military adventurers serving its faction.

beam-weapon attacks. Other applications included vicious neural poisons suitable for use in warfare (provided the attacker was sufficiently ruthless). Once communication was established with the Progenitors, the human colonists worked to understand the unique nature of their perception and psychology. Of particular

Foundations of a New Civilization (TL9: Mission Years 2180-2250)

To reign is worth ambition though in hell: Better to reign in hell than serve in heav'n. — John Milton, "Paradise Lost," Datalinks

About the time of the first breakthroughs into TL9, the human colonists entered a new phase. The transition was as much social as technological. With the immediate business of survival under control, the factions could begin the construction of a new Planet-wide civilization, qualitatively different from anything that had arisen on Earth.

It was during this era that the first major inter-factional conflicts took place. Each faction was in the process of perfecting its fundamental ideology, leading to increased tension between factions with incompatible goals. Those dedicated to the pursuit

of knowledge for its own sake had little love for those who demanded ever-increasing wealth, and neither could trust those who sought political or military power. What followed was vendetta on a grand scale, during which the factions struggled for the ultimate control of Planet.

Exploration

Once the colonists were familiar with the essentials of Planet's environment, they began to explore with greater confidence.

interest was the alien *resonance sense*, which provided direct experience of the basic forces of nature. Soon, a variety of new instruments were developed that gave human beings the ability to directly perceive electromagnetic and gravitic fields.

Since psionics also affect the resonance sense, these instruments gave humans new methods for studying and defending against psionic effects. A spinoff of this development was a variant form of the new armor, capable of deflecting both physical and psionic attack. In *GURPS* terms, this technology allows the use of psi-shielding devices (p. 108).

Late in this period, most factions turned to the production of "impact" weapons (p. 97). The earlier laser weapons were occasionally used against human targets, but impact weapons were the dominant tools of the first open wars on Planet. Factions that developed them early enjoyed a significant military advantage, and sometimes used that edge to consolidate political power.



Centauri Empathy (*Explore 3*)

Working from the first discoveries of psionic phenomena, scientists exploring Planetary biology began to discover psionic effects throughout Planet's natural ecosystems. Spurred by this discovery, the colonists began to develop psionics as a rigorous discipline, hoping to expand human potential in a radically new way. New biology labs appeared, where intensive study of native life forms could be performed under controlled conditions.

Empath Guild

With the discovery of Centauri empathy, several factions began to search for ways to apply their new psionic awareness to real-world problems. One faction developed an intensive training program for empaths, treating psionic talent as a priceless faction resource. Talented empaths worked hard to polish their talents and use them for the faction's benefit; in exchange, they enjoyed increased status within their society. Eventually, a formal Empath Guild was established - part trade union, part military organization, and part religious order.

The Guild's sponsoring faction gained tremendous benefit from it at once, as Planet's first powerful telepaths completed the task of opening communications with all the scattered factions. The Guild helped its masters to negotiate with other factions on favorable terms, allowing it to become the middleman for a series of technological and economic exchanges. Later, it was instrumental in bringing about the first meeting of the Planetary Council (see p. 66).

As the years passed, the Empath Guild remained the world's foremost institution for the psionic disciplines. Its members gathered intelligence, aided in diplomacy, and continued the quest for a deeper understanding of Planet.

In a *GURPS Alpha Centauri* campaign, the Empath Guild is a useful Patron for adventurers interested in developing telepathic ability. For some time after the Empath Guild appears, the GM may wish to restrict knowledge of certain telepathic techniques to its members. In particular, the technique of forming a telepathic gestalt (p. 91) is likely to be a Guild monopoly at first (and would help explain how the Guild enables long-range contact with every other faction on Planet).

The first fruits of this approach were felt in battle against mind-worm boils. Empathically trained soldiers learned to strike back against the psionic assault, confusing and fragmenting the boils before burning them out. Other empaths codified techniques for "taming" mind worms, reliably gaining their cooperation for the first time. Soon, a few factions were even breeding captive mind worms in order to study them - or to use them as living weapons against other factions.

In *GURPS* terms, this technology permits trained use of "true" telepathic skills such as *Telereceive* and *Telesend* (see p. 91). It also permits factions to use the Green social choice (p. 125).

Intellectual Integrity (Explore 3)

As the "ethical calculus" spread and proved itself a viable method for planning human action, some colonists began to speculate whether all human thought and belief might benefit from being placed on a basis of rigorous rationality. Meanwhile, the excesses of some advocates of the doctrine of loyalty led many to question the wisdom of blind obedience to any one human's commands.

The result was the Intellectual Integrity Movement, which crossed faction boundaries to reach almost every human on Planet. The Movement claimed that human beings could attain wisdom only by casting out all prejudice and rigorously questioning all assertions. Human action had to be driven by a passionate desire for truth, combined with a serene rationalism that could evaluate any hypothesis with dispassionate clarity.

Intellectual integrity eventually spread all across Planet. Factions that embraced it found themselves able to instill higher morale in their soldiers, who rejoiced in their freedom to accept risk on behalf of their society. Another effect of the Movement was greater respect for differences of opinion. The Movement claimed that any rational mind could discover truth, but it did not claim that this discovery would be easy or that rational people would always agree. In some factions,

this led to a reluctance to impose ideological uniformity by force. These democratic societies developed non-lethal methods for their internal police, using stun weapons and life-respecting tactics when it became necessary to enforce social order.

In *GURPS* terms, the Intellectual Integrity Movement represents the spread of Code of Honor (Scientist's) (p. 89). Followers are also more likely to have Honesty or Truthfulness.

Doctrine: Initiative (Explore 4)

The development of extensive industrial automation allowed the construction of many new vehicle types, including massive seagoing ships that could quickly strike out into the deepest oceans. These superseded the crude hydrofoil craft that had so far dominated the sea, and led to a new school of military science. Until now, the sea had been a mere adjunct to strategies emphasizing confrontation on land. Now the factions would struggle to command the seas themselves.

Ecological Engineering (Explore 4)

The industrial boom of the late-TL9 era was supported by ambitious reengineering of Planet's surface. A growing understanding of Planet's structure permitted former detachments to redirect the courses of rivers, drill thermal boreholes deep into Planet's crust, and place echelon mirrors and condensers to improve the productivity of their installations. This kind of activity often placed a heavy burden on Planet's natural ecology, but the factions investing in heavy industrial development found the cost worthwhile.

Synthetic Fossil Fuels (Explore 4)

The energy economy was rather inefficient at first, relying on solar collectors to energize a web of power cabling and rechargeable power cells. The colonists were forced to use such methods because Planet had never developed extensive deposits of high-energy

fossil fuels. During the industrial renaissance, the colonists developed methods of synthesizing such fuels.

The availability of synthetic fuels will usually come into play only in a vehicle-heavy campaign. For details on fuel scarcity and costs, see p. 121.

Discovery

Pure research continued to advance during this period, although there were no drastic breakthroughs. Engineering and the physical sciences enjoyed the most progress. Optical computers were reinvented, using photon-channel switches rather than transistors, and high-temperature superconductors were redeveloped, allowing more powerful and efficient uses of electromagnetic energy.

These TL9 developments lead to several items of *GURPS* technology. Bioscanners, chemscanners, and rad-scanners become available, and main-frame computers reach Complexity 6.

Building

The groundwork laid by the first colonists took root during this period. The colonial economy went beyond the mere replacement of worn-out equipment and began to produce significant economic surpluses. The first marginal bases became industrial centers, then cities. Naturally, as this development took place, the colonists were faced with the challenge of managing their new prosperity.

Maritime Control Center

As changes in military doctrine pulled the factions out to sea, many of them began to construct naval yards in their coastal and offshore bases. These specialized facilities were necessary to build the deep-hulled destroyers and cruisers needed for the new strategy. Soon came a revival of all the naval traditions of Old Earth.

One faction chose to specialize in naval warfare, building naval yards in every coastal and offshore base. In one base, it constructed a Maritime Control Center, which included the foremost naval academy on Planet, an extensive communications center, and a superb weather-forecasting facility. This Center was analogous to the old Command Nexus, a place from which the faction's entire naval force could be commanded and made more effective.

In *GURPS Alpha Centauri*, the Maritime Control Center can serve as a major Patron for seaborne explorers.

Citizen's Defense Force

The Intellectual Integrity Movement had profound impact on Planetary society, perhaps more than any other single event in colonial history. It was most influential in the "democratic" factions, those in which free expression and personal freedom were already respected. There, it led to a wholesale rejection of despotism and the warrior ethic. Instead of embracing military elitism (see *Doctrine: Loyalty*, p. 60), the Movement encouraged every citizen to accept the duty of upholding and defending society.

One faction went so far as to put this ideal into wholesale practice. It did away entirely with the concept of a distinct warrior class within society. Instead, volunteers manned both the faction's standing army and its defensive base garrisons. In times of crisis, the burden of base defense came to rest on the faction's entire populace.

The faction which organized this Citizen's Defense Force did not gain any significant advantage in vendetta. Its standing armed forces were no more effective in the attack than before. On the defense, however, its bases became much more difficult to take by storm. By rallying every faction member, the Citizen's Defense Force proved able to repel the fiercest attacks of mind worms or human invaders.

In *GURPS* terms, citizens of the faction that organizes the Defense Force will receive state-sponsored combat training. Even non-combatant adventurers will have at least a point in each of the Beam Weapons, Guns, and Tactics skills.



Adaptive Economics (Build 3)

Continued contact with the Progenitors led to the adoption of certain alien concepts in human scientific

theory. In particular, the Progenitors seemed surprisingly good at adjusting their worldview as needed. A belief that was held to be useful one day might be rejected as irrelevant the next, then reaccepted the day after that, all in reaction to changing circumstances.

In economic theory, this alien logic gave rise to "adaptive economics." This meta-theory described a wide variety of alternative economic models, and gave criteria for deciding which model was most likely to suit a given situation. The meta-theory was difficult for humans to work with, given their tendency to cling to a single worldview, but it could be done with advanced computer support. The result was greater economic efficiency.

In *GURPS* terms, the development of adaptive economics is the signpost for the first increase in average character wealth (see p. 94).

Planetary Transit System

In the early days, each base on Planet existed in near-isolation. When a faction chose to build a new base, the colonists and engineers had to set out across hundreds or thousands of miles of wilderness. Once a base was established, travel between it and the established settlements would be arduous and infrequent. It might take years before a new road was built to bring the growing city into constant contact with its parent faction.

The rise of industrial automation helped end that. Robotic transport made it easier to keep a faction's bases in contact, exchanging people and resources as needed. New bases could be set up to exploit specific resources, with the expectation that their products could almost immediately be moved back to the home city.

One faction invested heavily in a system of inter-city transport. This helped it to consolidate all of its

economic activity more effectively. It also ended the days of isolation for individual cities - thanks to a constant influx of settlers, even new bases could grow rapidly. For the first time, a faction gave up its character as a collection of allied city-states, and became something like a nation.

The most visible manifestation of the Planetary Transit System is an explosion in alternative transportation: long-distance robotic trucks, passenger aircraft, and ships, dirigible airships, rail lines, etc. The faction with the Transit System is the first to invest in such transport wholesale, and maintains an advantage in that area from then on. None of these vehicles are listed in Chapter 6, but GMs with access to *GURPS Vehicles* may wish to design examples.

Gene Splicing (Build 3)

Advances in genetic science and bioethics allowed the colonists to engage in large-scale genetic engineering for the first time. This work went beyond the simple genetic therapies that had been brought from Earth or developed in the first biology labs. Now, the genetics of plants, animals, and even humans could be significantly altered. Human subjects enjoyed benefits such as increased resistance to disease, greater longevity, and greater mental stability. Agricultural applications included chimeric crop plants and architectural coral.

This development permits extensive modification of the human genome. A few of the genetic alterations most often used on Planet are described in Chapter 5. GMs with access to *GURPS Bio-Tech* may wish to allow the full range of genemods listed there, most of which appear at TL9+.

Industrial Automation (Build 3)

As the industrial renaissance spread across Planet, local planners faced the problems inherent in a small workforce. The labor-intensive methods of the earliest industrial efforts had to be replaced by extensive automation. To a degree rarely

matched on Earth, industrial infrastructure was placed in the hands of sophisticated robots. Associated with the robotic factories was a boom in robotic vehicle design. Massive "supply crawlers" moved out onto Planet's surface, carrying commodities between bases or managing resource-exploitation operations far from direct human control.

In *GURPS* terms, this development indicates the appearance of widespread robotic automation. The cybertek (p. 109) becomes available at this point. Industrial automation also permits a faction to use the Wealth social choice (p. 125).

Cyberethics (Build 4)

As sophisticated robots and computers spread through Planetary society, there were often debates over their proper role: as slaves or as servants, as partners, or as simple tools? Confronted by such questions, philosophers found that intellectual integrity drove them to develop extensions to the ethical calculus. The resulting "cyberethics" laid out the proper relationship between computers and the society of biological intelligence.

Cyberethics allows the Knowledge social choice (p. 125).

Planetary Energy Grid

During the growth of the energy economy, factions constructed "energy banks" in their bases to act as both energy stockpiles and financial centers. One of the requirements of adaptive economics was a massive energy reserve, which could be applied if a shift in economic model called for a rise in energy consumption. Many factions increased the size of the energy banks in their bases to ensure such reserves.

One faction went so far as to build a Planetary Energy Grid, with an energy bank in each of its bases. The center of the Grid was a massive energy bank in one base, connected to the lesser energy grids of the other factions by a unique, application of Progenitor "manifold" technology. Once completed, the Grid could provide more effective backing for the planetary energy economy. It also allowed its builders to set up an energy futures market, meaning they could extract a profit from every fluctuation in Planet's energy requirements.

Conquest

Along with new social confidence and new prosperity came a new willingness to engage in vendetta. Innovative military doctrines and weapons systems continued to appear as the factions competed on the battlefield.

Adaptive Doctrine (Conquer 3)

Just as Progenitor contact led to adaptive economics, it had an effect on military doctrine. Human military institutions began to develop meta-theories of strategy, logistics, and tactics to adapt to rapidly changing circumstances on the battlefield. As this "adaptive doctrine" spread, new methods of attack and defense came into use. In particular, many factions began to use small commando units for special tasks, such as knocking out critical enemy installations or boarding enemy seagoing ships.



In *GURPS Alpha Centauri*, the units which begin to appear at this time are ideal foci for action-adventure campaigns. Small-unit actions are frequent throughout colonial history, but the appearance of adaptive doctrine marks the point at which factions begin to develop standing special-operations forces for high-risk missions.

Planetary Datalinks

Despite their differences, the various factions found many reasons to cooperate. Trade and commerce, the flow of personal communications, the exchange of scientific information - all of these went on even between enemies, in the absence of formal vendetta. One sign of this cooperation was the final marriage of the various factions' digital networks. By the end of this period, a new "Internet" had been established, allowing the citizens of every faction to communicate more or less freely. Some factions tried to control the digital web, restricting access to their citizens, while others embraced the free exchange of information.

After the development of cyberethics, one faction undertook to collect the sum of human knowledge. Everything that had survived from Earth or that had been learned and published openly on Planet went into a vast database, to be shared freely. These Planetary Datalinks proved to be a priceless resource for every faction, the ultimate repository of all cultural and scientific information.

Of course, the builders gained a significant advantage as well. They could concentrate on developing cutting-edge techniques of their own, secure in the knowledge that other factions would have to come to them to exchange secrets.

In a *GURPS Alpha Centauri* campaign, the development of cyberethics and the construction of the Planetary Datalinks mark the point at which the various factional networks have melded into a single global network. Computer intrusion is now feasible across intercontinental distances. Naturally, the most important systems will be isolated from the global network - probe teams will still need to infiltrate enemy territory to accomplish anything truly significant.

Advanced Military Algorithms (Conquer 4)

Advanced optical computers and their software had their own military applications. During this period, a wide variety of advanced military techniques appeared: long-distance sensors, air-search tracking, defensive fortifications, etc. These developments led some factions to consider military action to be the primary path to control of Planet.

One perversion of the new computer technology was the punishment sphere (p. 107). In this infernal device, nerve-stapling equipment was used to punish dissidents or criminals. The more totalitarian factions most often used the punishment sphere, although even some democratic societies built punishment sphere facilities in a few bases. These bases could then be used as penal colonies, where criminals could be isolated from the rest of faction society and punished for their crimes.

This technology also allows the Power social choice (p. 125).

Bioadaptive Resonance (Conquer 4)

Further analysis of Progenitor technology led to the addition of resonance effects to various energy weapons. The upgraded systems could do both physical and *mental* damage to living targets. In game terms, this technology permits the use of the resonance amplifier (p. 99).

Neural Grafting (Conquer 4)

The drive for greater industrial efficiency also required the improvement of *human* capability. In the long term, this would be accomplished through genetic engineering; in the short term, it was often attained through bionics. Colonists accepted biomechanical implants, improving their senses, reaction time, strength, and other capabilities by becoming part machine. At first, these implants were attached only to peripheral motor and sensory nerves, but as time went on, the interface between man and machine crept closer to the brain itself.

Neural grafting manifests itself in *GURPS* as *implant technology* (p. 106).

Planetary Diplomacy

Eventually, all of the colonist factions came into contact with one another, moving diplomacy into a new phase. Diplomatic negotiations would now involve matters of Planet-wide importance.

The Planetary Council

The original U.N. colonial charter required the election of a Planetary Governor, who would hold legitimate authority to manage human affairs on Planet. Once the colonists split into factions, the elections called for in the charter seemed impossible to arrange. Eventually, a compromise was reached by which each *faction* would carry votes in proportion to its population. Democratic factions could actually hold some form of election to decide how to allocate their votes, while totalitarian factions could vote as their leaders dictated. Once the factions agreed to this system, they were able to elect a Planetary Governor.

At the same time, the faction leaders themselves formed a Planetary Council. This Council had no physical existence - throughout the history of Planet, there was never a face-to-face meeting of all the faction leaders. Still, from time to time, one faction would call a meeting of the Council to discuss matters of general importance. The faction leaders would assemble "virtually" using the global information web.

Although the Governor's position was largely ceremonial, it did confer certain advantages. Since the Governor's faction served as the nominal Planetary government, it often received visits from citizens of other factions, bringing increased trade and intelligence information.

Proposals in Council

Any Council member could call a meeting of the Council, although a sitting Governor could do so more often. Such occasions were rare, occurring years or even decades apart, and were often preceded by intense political maneuvering within and between factions.

The first order of business at a Council meeting was often the election of a new Governor. Once that was out of the way, the Councilor calling the meeting could make a variety of other proposals. Most often, these involved general

economic agreements that increased (or reduced) trade between factions. The Council also considered limitations on ecological damage, or steps to mitigate the worldwide effects of such damage.

Finally, the U.N. Charter itself sometimes came up as a subject for debate, especially the provisions protecting human rights and forbidding atrocities in warfare. Some factions pushed for the repeal of those provisions, while others demanded their preservation.

Voting on these proposals took a different form than the election of the Planetary Governor. Each faction leader had one vote, and a simple majority won. The Governor held a veto, however - if he voted "no" on a proposal, then it was automatically defeated unless *all* of the other faction leaders voted "yes."

Rules of War

The U.N. Charter had a section calling for severe sanctions against anyone found guilty of "crimes against humanity." Several examples of this were defined in the Charter. The strongest language involved the use of weapons of mass destruction, especially nuclear weapons (or the "planet busters" developed later on Planet). The use of nerve gas or genetic warfare was defined as a serious but lesser crime. The colonists interpreted a provision against "ethnic cleansing" to mean that factions who conquered others' bases were forbidden to destroy them or deport their populations. The Charter made no mention of nerve stapling (p. 107), but provisions regarding "individual self-determination" were later interpreted as forbidding the practice.

As long as the U.N. Charter held on Planet, these atrocities were all likely to draw a response. A faction that committed them risked trade sanctions or the loss of good relations with others. Extreme violations, such as the use of planet busters, were kept in check by the threat that *every* faction would join in a war of extermination against the criminals. Naturally, if the Planetary Council declared the U.N. Charter in abeyance, then the legal basis for such actions would collapse. This is one reason why the most aggressive factions constantly lobbied the Council for a repeal of the Charter.

Neural Amplifier

One faction, experimenting with the new technique of neural grafting, investigated ways to amplify psionic ability. The original goal was to grant telepathic ability to citizens who had no natural talent. This proved a far more difficult proposition than expected, but the faction's scientists did discover one extremely useful technique.

A specific implant was developed for placement near a subject's spinal column and cerebellum. Soldiers and citizens who received the implant received some protection against psionic attack, whether from enemy telepaths or native creatures. The implant required the presence of a specific resonance field, which could be broadcast from a

base or from a military unit's command post. Without this field, the implant had no effect, so the faction designing the Neural Amplifier was able to maintain a monopoly on the technology for many years.

The implant and field generator for the Neural Amplifier are described on p. 106.

Return to Space

(TL10: Mission Years 2250-2310)

To seize air superiority, and to hold that advantage as long as possible, must be our highest priority. Once we are able to move men and material thousands of miles in a day, to strike at will into the heart of an enemy's territory, to think once again of taking the high ground of space . . . then no one shall ever threaten our legitimate interests again.

- Colonel Corazon Santiago, "Planet: A Survivalist's Guide"

The reinvention of high-energy fuels proved momentous, as it permitted the colonists to finally break the bonds of Planet's gravity. First came high-performance aircraft. Later, the colonists repeated the history of spaceflight on Earth, launching unmanned probes, then sending manned missions into space with increasing confidence. Eventually, a permanent human presence in space was established. The survival of humanity in the universe was assured - and there was renewed hope of an eventual return to Earth.

Exploration

Most effort in this period was directed toward the return to Planet's skies,

Xenoempathy Dome

Centauri meditation permitted deeper communion with the sentience believed to reside in Planet's fungal mats. The colonists soon made a crucial discovery: certain telepathic adepts were able to exercise "Xenoempathy," the ability to sense the structure and intention of the xenofungal mats in their vicinity. Military units led by xenoempaths could move through the mats at uncanny speed, striking deep into foreign territory long before any defender could expect them. Terraformers using Xenoempathy could work with and around the fungus with greater effectiveness. Finally, insight into the symbiosis between fungus and mind worms led to improvements in programs for breeding the native marauders in captivity.

One faction invested heavily in training xenoempathic adepts. The Xenoempathy Dome was a center for training in the telepathic disciplines, similar to the old Empath Guild. With many of its adepts trained in Xenoempathy, the faction controlling the Dome was able to apply the new technique to all of its military and former units.

Like the Empath Guild, the Xenoempathy Dome can act as a Patron for empathic characters. The faction owning the Dome will be the first to develop the Xenoempathy skill (p. 90), and will hold a monopoly on it for some time. The GM should make sure that the players don't think of this skill solely in terms of convenient movement through fungus areas. The discovery of the skill

leads to a fundamental shift in human understanding of the nature of Planet.

Doctrine: Air Power (Explore 5)

The first step toward space was a new military doctrine, emphasizing the use of aircraft during vendetta. Since the pace of inter-factional conflict was increasing, the initial designs for high-performance aircraft were military. "Needlejets" and "penetrators" were designed to attack enemy units and bases from the air, while "interceptors" were fighter aircraft designed to defeat such attacks. The factions that most swiftly returned to the air gained a killing advantage over their adversaries, at least until those enemies developed their own air power.

Discovery

Scientific research continued, boosted by the stimulus of space travel. Planet's research community made great strides in the physical sciences, and also developed computers more intelligent and powerful than anything that had been built on Earth.

Pre-Sentient Algorithms (Discover 5)

Computers made great strides during the new Air Age, pushing the borders of machine intelligence to the point of near-equality with humans. The newest computers were clearly on the human level with respect to data processing and creativity, capable of advanced reasoning and learning. They were not self-aware, displayed no signs of psionic ability, and did not mirror the biological mechanism for consciousness, but they had distinctive personalities and were often treated as "people" by their human partners.

This development permits computers to be built with the "pre-sentient" option (p. 101) and allows mainframe computers to reach Complexity 7.

Hunter-Seeker Algorithm

The history of information networks on Planet often paralleled that of the Internet on Earth. The earliest networks were designed to make information exchange more convenient, and security was not a major consideration. Later, as factions came into conflict and probe teams became common, networks were redesigned to make them harder to misuse or pervert.

With the development of pre-sentient algorithms, one faction saw a way to make its networks virtually impenetrable. Rather than rely on human vigilance to prevent exploitable vulnerabilities, it designed a series of advanced programs for the express purpose of patrolling the factional networks. These unsleeping guardians could watch constantly for unauthorized access, using their ability to learn and adapt to close new vulnerabilities faster than any enemy could exploit them.

Making these "hunter-seeker algorithms" truly effective required a radical redesign of the faction's networks, but it was well worth the effort. Suddenly, enemy probe teams could not find any exploitable openings, and indeed the new algorithms proved able to trace any intrusion quickly and alert their human masters. Many a rival faction's probe team earned only arrest and execution for its attempt to bypass the Hunter-Seeker Algorithm.

For game mechanics covering the benefits of the Hunter-Seeker Algorithm, see p. 103.

Fusion Power (Discover 6)

The new industrial economy encouraged the development of clean energy sources. A great breakthrough in energy extraction came with the development of viable small fusion power plants. Fusion power had been known on Earth, but it was bulky and inefficient, and the infrastructure needed to maintain fusion plants had long been unavailable on Planet. Now, not only could fusion power be brought on line, but also the fusion plants themselves were smaller and more efficient than anything that had been built on Earth. No longer were bases forced to rely on low-performance solar power; no longer did military units require an extensive logistical "tail" of energy cells and synthetic fossil fuels. Cheap, clean power was available for a thousand different applications.

With this development, small fusion power plants become available for *GURPS Vehicles* designs.

Orbital Spaceflight (Discover 6)

Once the colonists took to the air, they immediately began planning for a return to space. First, suborbital

probes were launched. Next, both unmanned and manned vehicles were put into orbit. As on Earth, some applications of the new technology were military: long-range strategic missiles and horrifying "planet buster" weapons. On the other hand, communications and mapping satellites soon completed the process of tying the scattered factions together into a single world community. Further, the first human presence in orbit promised a variety of new strategies for gaining critically needed resources.

Spacecraft and space-based adventures are beyond the scope of *GURPS Alpha Centauri* (and play at best a tangential role in the *Alpha Centauri* computer game). GMs interested in space adventures are encouraged to use *GURPS Space* to expand their campaigns.

Building

The accelerating pace of activity put its own demands on Planet's industrial infrastructure. In order for economic growth to continue, the colonists had to find new ways to organize their industrial activity.

Bio-Engineering (Build 5)

Genetic technology continued to make incremental advances, permitting significant modifications to the genome of humans and other Earth-born life. Genetic therapies were widespread, ending many of the genetic disorders and viral diseases that had plagued humanity for most of its history. Many designs for "upgraded" human genetics became available. Human genetic engineering had already been underway for some time, but this new mastery of genetics allowed the production of actual human subspecies.

Another application involved "living" equipment and machine parts. Specialized organisms could provide power and other functions, replacing parts made of brute non-living matter. The resulting equipment could be made more efficient in many respects: self-repairing, lower-maintenance, and powered by eco-friendly means.

In *GURPS* terms, this development matches the advent of "bio-mechanical" structures for vehicles or robots (for example, see p. VE18). Assume that this option actually becomes available at TL9, but that this development marks the point at which it becomes widespread.

Environmental Economics (Build 5)

The spread of "green" industrial strategies was hindered by the persistence of old economic concepts imported from Earth. Eventually, however, planners developed a rigorous system of "green economics" by treating Planet itself as a player in the economic system. Damage to the environment was reckoned as a cost to the human community.

In *GURPS* terms, this development marks the second major increase in average personal wealth (p. 94).

Monopole Magnets (Build 6)

Along with fusion power, advances in physics allowed the manufacture of *magnetic monopoles*: exotic subatomic particles with only one

magnetic pole each. These were used to produce powerful and efficient equipment such as motors, magnetic-levitation systems, and plasma-containment devices. As these developments spread, many factions began to construct ultra-high-speed "mag tubes" connecting their bases. These connections sometimes even bridged factions, binding all of Planet into an interconnected transport network.

Monopole magnets mark a further surge in the diversity of Planet-bound transportation. GMs with access to *GURPS Vehicles* may wish to experiment with high-speed passenger aircraft and mag-lev "bullet trains."

Planetary Economics (Build 6)

Industrial development on Planet involved the evolution of markets in specific sectors: industrial equipment, scientific equipment, energy, armaments, consumer goods, etc. This division of economic activity, essentially artificial as it was, produced inefficiencies as distinct market models tried to interact with each other. Eventually, a further advance

Longevity Vaccine

The mastery of genetic technology implicit in bio-engineering was a tremendous boon to medicine. Nowhere was this clearer than in the field of geriatrics. One faction, deeply involved in the study of aging, developed the so-called "Longevity Vaccine." This was a series of genetic therapies and nanoviral inoculations that had the net effect of vastly extending the human lifespan. Once the Vaccine was developed, most of a faction's population could enjoy the health and longevity that was once the sole province of faction leaders.

Naturally, the faction that first managed this revolution in geriatric science enjoyed much-reduced social unrest. The difference in lifespan between each faction's elite and the common citizen had long been a major factor in drone discontent. Now everyone could look forward to centuries of life, and jealousy of faction leadership was much reduced.

The faction that first developed the Vaccine also enjoyed a boost in its influence in diplomatic affairs. For a long period, the nature of the Vaccine was a closely kept secret, and the faction that held it maintained a monopoly on its use. Suddenly, other factions found their own citizens clamoring for alliance with the Vaccine's developers, lest the gift of longevity be withheld. This quickly translated into votes in the Planetary Council, especially when it came time to elect a new Planetary Governor.

For game mechanics covering the Longevity Vaccine, see p. 107.

in economic theory was needed, a "planetary economics" that reconciled all the existing models in an interconnected whole.

One spinoff from the new economics was the "hybrid forest." Genetic engineers turned their expertise to the science of ecological engineering. Their artificial ecologies took Earth-born species, genetically altered to survive unprotected on Planet's surface, and integrated them with Planet's native species. Such forests required careful ecological management, but the results were well worth the expense. Hybrid forests significantly improved yield from the forestry industry and reduced ecological disruption from terraforming.

Ascetic Virtues

During the new Space Age, one of the most important social movements was the New Asceticism. Unlike many of the philosophical movements important to Planet's history, this one was largely restricted to a single faction. Even so, it played a prominent role in later events.

The New Asceticism was rooted in the economic theory of planetary economics. It caused its faction to take a radically different direction from most of the others. Rather than concentrate on producing more and better goods for consumption, the faction encouraged its citizens to be satisfied with less. They refrained from the quest for personal possessions and luxuries, concentrating instead on service to the faction's ideals. By discovering the "Ascetic Virtues," the faction managed to increase its population and dramatically reduce social unrest.

This philosophy of self-denial was not much imitated outside the faction in which it appeared. Even so, it later proved to be one seed of the ultimate Era of Transcendence. In later decades, members of the Transcend movement adopted many elements of the New Asceticism.

The New Asceticism was a gentle doctrine. It demanded only reasonable restraint from its followers. In *GURPS* terms, a New Ascetic would probably have the Honesty disadvantage. He would not have Greed, Miserliness, or any Compulsive Behavior involving money. On the other hand, he would not allow himself to gain more than average wealth (although he would willingly use expensive equipment owned by others, if necessary for his duties).

Conquest

Advances in subatomic physics led to the formulation of a viable superstring theory, explaining all the properties of matter in terms of the behavior of minuscule, vibrating loops of "superstring." The new theory had its problems, but it did lead to several military applications, including the production of so-called "chaos weapons," which vastly increased striking power. These weapons were among the first used to arm the new military aircraft.

The Secret War

Factions wrangled over ideological issues and fought in vendetta, but they also used more subtle means to pursue their goals. One weapon was used only occasionally but could be devastatingly effective: the *probe team*.

Infiltration

A probe team was a small military detachment, rarely composed of more than a dozen individuals. About a third of its members were armed and trained as commandos. The rest were trained in intelligence-gathering and propaganda operations, and carried the most advanced computer and espionage equipment available. In factions with access to telepathic training, probe teams were usually recruited from the most skilled adepts.

The probe team's job was to cross Planet stealthily and approach bases or military units belonging to competing factions. Once in contact, the team would penetrate enemy digital networks and use telepathy to tap into enemy minds. When infiltrating an enemy base, the probe team might take up a position within the base population itself, using disguise and forged identification. Once in place, it had a variety of possible tasks.

The most common task for a probe team was to tap into the enemy's secure information networks. This might yield considerable intelligence on the position and strength of military units, the output of base industries, etc. With more effort, the team could delve into the enemy's research networks, stealing information regarding his advanced technologies. This kind of espionage happened constantly throughout Planet's history, even on occasion between Pact Brothers. To be sure, probe teams that were caught could be subject to harsh treatment, but in many cases the target faction contented itself with deporting the spies and lodging a diplomatic protest.

Propaganda

During times of vendetta, one of the more devastating applications of probe teams was the wholesale subversion of enemy military units and bases. This was often called "mind control" by the colonists, but in fact it never involved the brute-force brainwashing of entire populations.

Instead, the probe team might spend months finding the weak points in a target's power structure. Bases and military units were often quite isolated, hundreds or even thousands of miles away from central authority. Local leaders were often forced to act independently, and in many cases developed strong local loyalties. At times, these loyalties were stronger than that ties of ideology or faction - and it was in just such situations that probe teams were most likely to seize advantage. A base governor or military commander could be encouraged to declare for a different faction, or he could be deposed in favor of someone more flexible, all with the help of the probe team's subtle electronic and telepathic influence.

At times, the probe team combined this kind of subtle manipulation with outright propaganda aimed at a base's population. If a base was already suffering social unrest or drone rioting, then the probe team would find it that much easier to seize control. If necessary, drone populations could be *pushed* into rioting with carefully designed rumors and news releases.

Sabotage

If infiltration or subversion were insufficient, then the probe team might turn to terrorism. Probe teams were often sent into enemy bases to engage in sabotage, destroying vital facilities or industrial production. The most dangerous of these missions involved bringing down a base's perimeter defenses in preparation for a military attack.

Alternatively, the probe team could be ordered to sabotage the enemy's energy grid, diverting energy to their own faction's use. Such missions were dangerous, but could be among the most personally lucrative for the team's members.

If all else failed, then the probe team might be sent in to perform an act of genetic warfare. Delivering infectious nanoviruses or mutagenic poisons to a base could have a devastating effect on both civilian populations and military garrisons. Such an act was regarded as a crime against humanity, however, and rarely occurred unless the U.N. Charter was in abeyance at the time.

Defense

In general, the best defense against enemy probe teams was to have friendly probe teams on hand. These could be positioned as counterintelligence units, searching out evidence of enemy infiltration and calling in police or military units when necessary. Factions that rarely launched covert offensives would often invest in healthy probe-team contingents for this reason.

As technology advanced, factions with better AI computers or more skilled telepaths found themselves more resistant to probe-team subversion. The Hunter-Seeker Algorithm (p. 68) was the most extreme example, but even mundane applications of technology could do much to boost faction security.

Social choices also had an effect on probe-team operations. Theocratic states were exceptionally effective at the espionage game, producing fanatic agents and populations highly resistant to subversion. Later in Planet's history, factions engaging in "thought control" (p. 125) enjoyed a similar advantage. Conversely, democratic factions that chose the advancement of knowledge as their primary social goal frequently found themselves vulnerable to probe-team attack, as their open societies and unsecured data networks allowed enemy spies safe lodging.

These discoveries also had defensive applications. Revolutionary new techniques were developed for the manipulation of light, warping its path or diffusing it as necessary. This technology was first applied to defense against energy weapons.

Mind/Machine Interface (Conquer 6)

One of the most significant developments in Planet's history was the appearance of full neural interfaces. Suddenly, a modified human being could commune directly with one of the new advanced computers. The combination could control large machines or advanced robots almost as an extension of the human body. The first use of this technology was in the aerospace industry, where it allowed pilots of needlejets and "copters" to enjoy immediate response from their aircraft. A hundred other applications appeared almost immediately, in scientific research, industrial management, and even entertainment.

Cyborg Factory and Cloudbase Academy

Mind/machine interface technology was so useful that some factions organized their entire social systems around the use of neural interfaces. One faction devoted resources to giving almost every citizen some level of bionic enhancement, including at least a neural interface. Another dedicated itself to the military advantages of air power, building airbases in every city and constructing the famous Cloudbase Academy in an attempt to produce Planet's most accomplished pilots. In both cases, the major result was increased military effectiveness. Cyborg soldiers and elite pilots alike became the most accomplished (and most feared) members of their respective professions.

In a *GURPS Alpha Centauri* campaign, either of these Secret Projects might form the basis for a whole military campaign, as elite soldiers or pilots fight faction enemies and have personal adventures between missions.

This development permits the use of socket neural interfaces (p. 102).

Retroviral Engineering (Conquer 6)

Mastery of genetic engineering had its military uses - notably the

production of tailored viruses that could cause genetic alterations in living organisms. This allowed genetic upgrades to be delivered even to adults, and had many beneficial medical applications. It also formed the basis for terrible viral weapons and genetic atrocities.

The Humanity (TL11: Mission Years 2310-2370)

In ancient times, the members of our own family and tribe were human, but all else was a dangerous Other. Our entire history can be considered a process of pushing this boundary back, toward a point at which nothing that thinks can be said to be alien to us.

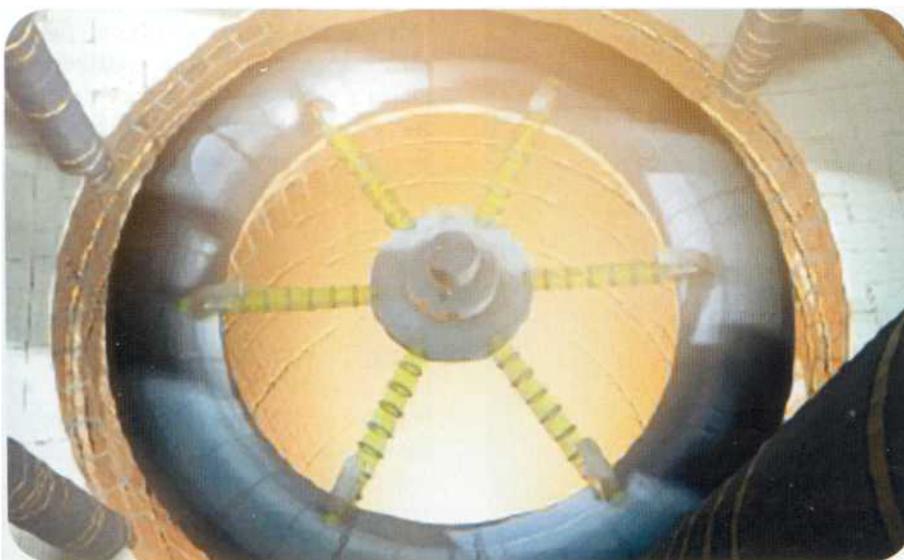
- Lady Deirdre Skye, "Arguments in Council"

Borders of

Tech Level 11 developments marked the beginning of the last phase of human history on Planet. The pace of technological innovation reached frantic levels. The era was similar to that of Earth's final century, when radical innovations seemed to appear almost every day. This time, the very definition of "humanity" came into question, as the human species fragmented into genetically engineered subspecies and began to share civilization with machine intelligences.

Exploration

By this time, the geography of Planet had been thoroughly mapped. The traditional "where no one has gone before" style of exploration was now taking place off Planet. Still, exploration of the details of Planet's natural environment continued.



Centauri Genetics (Explore 7)

Human biologists had mastered their own genetic inheritance, but the ability to engineer Planet's native life remained elusive. Finally, the breakthrough was made, allowing biologists to unravel and manipulate the densely packed genetic structures of native life forms. The colonists were able to step up their breeding of mind worms and other native life, sometimes building great brood pits to facilitate the process. They also found themselves able to trigger the transformation of mind worms into their rarest vector form, the airborne locusts of Chiron.

When applying *GURPS* rules covering genetic engineering (notably those from *GURPS Bio-Tech*), all techniques are considered to be two TLs higher when applied to fungus, mind worms, or other native life. For example, the cloning of most Earth-born animals (including humans) is late TL7 or early TL8. The cloning of Planet life is *at least* TL9 and is more likely to be TL 10. The TL 11 techniques involved in this development, as applied to Planetary life forms, have scope similar to the manipulations of human DNA possible at TL9.

Centauri Psi (Explore 8)

As the power and skill of psionic adepts grew, they reached a full understanding of the psionic abilities of mind worms in their natural environment. Eventually, human empaths were able to mimic the psi-net with which the mind-worm boil coordinated its activities, as well as the psi attack that enabled it to paralyze its prey. Application of these new theories allowed human military units to link their own psi talents together in similar fashion, mounting devastating attacks directly against their enemies' minds.

In *GURPS* terms, this development increases Telepathy Power and permits *all* Telepathy skills to be learned (p. 91).

Homo Superior (Explore 8)

As medical nanotechnology advanced, nanohospitals appeared in the largest human bases. There, tailored nanoviruses made possible the extensive genetic and physical repair of living patients. Other nanomachines were integrated into the physiology of healthy citizens, supporting their immune systems and self-repair mechanisms.

One side effect of the new nanotechnology was the appearance of several significantly altered human subtypes. The specifics varied, but every version of *Homo superior* was engineered for strength, health, and longevity. A common technique was to integrate the modified nervous system intimately with machine intelligence. The resulting composite beings blended the best of both realms, wedding the sensory and emotional experience of the biological organism with the rapid data-processing capability of the machine.

Nanometallurgy (Explore 8)

In the realm of more ordinary engineering, nanotechnology allowed the production of new materials with nearly miraculous properties, including incredible strength and durability. Seagoing vessels could now be built with light but exceptionally strong hulls. The new materials could also be repaired using nanomachines in the field, reducing the logistical "tail" of long-range military units.

The development of nanometallurgy permits thermal superconductor armor (p. 100).

Discovery

Pure scientific research in the mid-24th century was closely tied to the new space industries.

Advanced Spaceflight (Discover 8)

In this period, the human colonists returned to space with confidence. Manned spacecraft went well beyond Planet's orbit, visiting Planet's moons and going out to the rest of the Alpha Centauri system. Advanced industrial installations were built in space, including large "powersats" in orbit and automated mines and factories on the moons.

Back on Planet, the colonists learned a number of tricks from the ancient starfaring civilization of the Progenitors. Progenitor technology aided in the construction of sophisticated surveillance satellites, as well as anti-missile defenses protecting

Pholus Mutagen

Centauri genetics was a crucial development in human history on Planet. Once the complex genetic code of Planet's life became clear, the way was open for a radically new relationship between Earth-born and indigenous life forms. One faction set out to perform the equivalent of the Human Genome Project on native life, concentrating on mapping the entire genomes of the xenofungus and its mind-worm symbiont. The result was the discovery of the Pholus Mutagen.

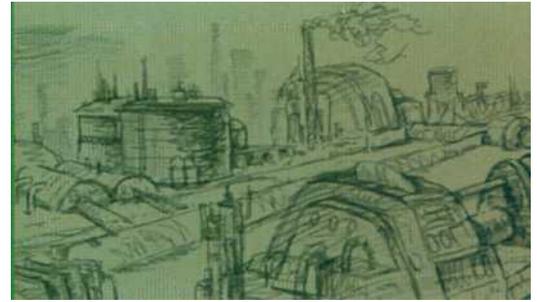
Biologists had long been impressed with the incredible depth of symbiosis among Planet's species. The Mutagen proved to be the biochemical key to those relationships — a chemical "super-DNA" that served to mediate between the genomes of many different species. Once receptor sites for the Mutagen were spliced into Earth-born species, it became possible to release those organisms into the wild with a much-reduced chance of triggering Planet's immune response. Even human beings found themselves better able to communicate with native life forms.

The faction that discovered the Pholus Mutagen invested resources in "building" it into almost all of its food-crop plants, trees, livestock, and gene-altered specialty organisms. Over the long term, they managed to reduce damage to Planet's ecology drastically, with a corresponding fall in mind-worm attacks.

Universal Translator

The *Homo superior* branches of humanity were often talented at communication. Some were telepaths, with a deep understanding of the symbols used by the human mind. Others were advanced cyborgs, combining a supernaturally sharp consciousness with a gut understanding of human nature. Both varieties found it easy to deal with their fellow humans, shifting comfortably between languages and dialects, understanding even the unspoken motives of others.

One faction with an unusual number of these "upgraded" citizens applied their talents to the translation of Progenitor language. Communication with living Progenitors had always been difficult. Even more mysterious was the ancient written language inscribed on the great monoliths scattered across Planet. The faction sponsoring the study eventually made a great breakthrough, and found itself able to read the monolith inscriptions. The result was a rapid advance in several areas of technology, as the inscriptions proved to hold the key to several new developments.



"construction" of fully biological robots and the forced growth of human clones.

This technology permits the use of forced-growth tanks (p. 107). The full range of computer and personality implants from *GURPS Ultra-Tech* are also available, if the GM wishes to permit them in his campaign.

individual bases. New loads were devised for strategic missiles, delivering vast quantities of xenofungal spores or tapping tectonic forces to cause earthquakes.

These developments mark the appearance of reactionless thrusters in the *Alpha Centauri* setting. GMs using *GURPS Space* or *Vehicles* to design spacecraft may now use reactionless drives in their designs (but see Appendix A).

Building

While the colonists were climbing back into space on pillars of fire, a quiet revolution in industrial methods was also underway. Nanotechnology carried the promise of radically new materials and methods of production, permitting the design of whole classes of machines that had never been seen before.

Advanced Ecological Engineering (Build 7)

Terraforming technology matured as the colonists drew on the experience of thousands of construction projects completed since Planetfall. Armed with fusion power, advanced computers, and a wide range of genetically engineered life forms, the so-called "super former teams" could complete terraforming tasks in a fraction of the time they once required.

Biomachinery (Build 7)

This period saw the first breakthroughs into true nanotechnology, the construction of molecular-scale machines. Experiments in retroviral engineering and miniaturized tools led to the integration of machinery with living organisms at the level of individual cells. Aside from advancing the state of bionic engineering, these techniques allowed the

Probability Mechanics (Build 7) "

Advances in physics gave the colonists a limited ability to understand and manipulate the apparently random mechanisms underlying physical reality. Suddenly, the results of even chance events could be predicted or altered with some confidence. In many cases, the level of control needed was too fine for even the most advanced computers, but defensive military applications were simple enough. Probability sheaths, photon walls, and tachyon fields that could deflect or stop attacks soon protected military vehicles and bases.

Probability mechanics permit the use of the probability sheaths and photon walls (in *GURPS* terms, deflector fields and force screens) on p. 100.

Nanominiaturization (Build 8)

Nanotechnology permitted the construction of extremely small but powerful machinery. As the new technology spread, many items of equipment were vastly reduced in size. For example, equipment used in covert operations and network infiltration could be made so small as to conceal it from detection. Probe teams armed with the enhanced equipment were more versatile and effective, able to attack targets previously considered impenetrable.

Living Refinery

Once the colonists developed advanced spaceflight, they moved to develop space to a greater extent than had ever been done in the home solar system. Eventually, much of Planet's industrial infrastructure was based off Planet entirely.

One faction built the so-called "Living Refinery," a vast industrial complex on Nessus controlled from a base back on Planet. The Refinery was "living" because it made heavy use of genetically engineered microbes, efficiently producing a variety of useful fuels and biomechanical parts. The Refinery had little direct effect on industrial production, but its owners did enjoy significantly greater logistical efficiency in both civilian and **military** facilities.

Cloning Vats

Human populations had always grown slowly on Planet, constrained by hostile conditions. Despite all the advances in genetic and medical science, it was still more difficult for women to conceive children and bring them to term than it had been on Earth. Most factions had invested in technological surrogates, using *ectogenesis* (artificial wombs) or other techniques to bolster their birth rates.

With the advent of biomachinery, however, it became possible to build "forced-growth" tanks. In these devices, human clones or genetic constructs could undergo greatly accelerated maturation, producing a useful citizen in a fraction of the usual time. Most factions experimented with this technology, but in the end it was attractive only to the more aggressive and totalitarian regimes. The notion of "building citizens" was much more natural to those who were already accustomed to treating their citizens as interchangeable parts.

One such faction took this new technology to the extreme. It built an extensive complex of forced-growth tanks in one of its bases and applied age-old industrial techniques to the production of new citizens. In the short term, these "cloning vats" allowed the faction to grow rapidly, expanding within a decade to the limit of available food resources and living space. The long-term results were serious social and economic upheaval, as "natural-born" citizens suddenly found themselves outnumbered by armies of clones and near-clones. Dealing with these problems required either significant resources devoted to expanded social benefits, or the application of totalitarian methods of government.

In *GURPS Alpha Centauri*, the Cloning Vats are most likely to affect individual citizens through drastic social change and upheaval, but an interesting campaign could be constructed around the idea that most of the PCs are forced-growth clones themselves.



(but see *Algorithmic Enhancement*, p. 123).

Conquest

The race between offensive and defensive technologies continued apace. New advances in physical science gave rise to new beam weapons. The *fusion laser* was an X-ray laser, capable of penetrating most armor and dealing vicious damage to the enemy. The *tachyon bolt* appeared soon afterward, a particle-beam weapon of slightly greater effectiveness. Finally, spinoffs from the new aerospace industry led to the production of *plasma shard* weapons, the last major wave of weapons development on Planet. Weapons of ever-greater destructive power continued to appear, but the shard cannon was the last to be mass-produced and used in major inter-faction wars.

A spinoff of nanominiaturization way to hovertank squadrons, which swept was the construction of a new gener-across Planet's surface with ation of air-cushion vehicles. Nano-unprecedented speed and mobility. engineered materials and components Nanominiaturization leads to the allowed these vehicles to carry heavy appearance of Complexity 8 mainframe cargoes or become powerful weapons computers. There are no explicit rules platforms. The speeder teams that for the advantages to probe teams from once dominated mobile warfare gave this technology

Theory of Everything

During the Space Age, physicists made one of the most significant breakthroughs in human history: they formulated the Unified Field Theory, a mathematical model that provided an elegant, unified description of all physical matter and forces. The new theory had widespread applications.

Many physicists were satisfied with the Unified Field Theory, but it did contain one serious flaw. It described *how* physical reality worked, in terms of a small number of basic equations and constant values, but it could not say *why* those equations and values worked. Indeed, it seemed to suggest that different physical laws could have been possible.

One faction chose to dig deeper, trying to discover the conditions that held before the universe began. They hoped to prove that physical laws had been somehow constrained, or that some heretofore unknown factor had *selected* laws for the universe. The quest was a difficult one and required vast expenditures on experimental equipment. When the final Theory of Everything was discovered, it proved to have few practical applications (the market for new universes being rather limited). It had profound philosophical implications, however. Scientists and scholars flocked to the base where it was developed, establishing one of Planet's greatest centers for scientific research.

Planetary Engineering

As human civilization reached TL11, the process of terraforming Planet went well beyond any strictly local approach. The effects of human activity threatened the ecosystem with uncontrolled change. In response, the Planetary Council had to consider ways to take Planet's climate under deliberate control.

Global Warming

Large-scale industry had always been more ecologically friendly on Planet than on Earth - especially in comparison with Earth's final century. Synthetic fuels were extremely expensive, and were never burned in the same tremendous quantities in which fossil fuels were burned on Earth. The release of other greenhouse gases was similarly low.

Even so, as the industrial boom continued, it became obvious that Planet might suffer a bout of global warming similar that experienced on Earth. Long-range climatological studies suggested that before human settlement, Planet's climate had been only loosely stable, so that even small releases of greenhouse gases could have a profound effect. The threatened result was widespread flooding. Planet's polar ice caps were relatively small, but they still locked a great deal of water out of the oceans, and their disappearance would have caused a significant rise in sea levels.

The colonists found themselves unable to impose strict environmental restrictions, since "green" ideologies were usually badly outnumbered on the Planetary Council. Instead, each faction dealt with its own environmental impact as best its technology and inclination allowed. Eventually, when humanity had returned to space, the Council considered ways to manage sea level deliberately.

One proposal involved deploying a massive solar shade at a Lagrange point between Planet and its primary.

Constructed out of mined asteroidal material, the shade would have cut Planet's insolation by a critical few percent. This would not have been enough to reduce civilization's energy budget, which was no longer much dependent on solar power in any case, but it would have neatly offset the increase in temperature due to the greenhouse effect.

An even more radical proposal, brought forth by a faction that favored the sea, was to *increase* global warming. Instead of building a planetary shade, this faction proposed building a *soletta*: an arrangement of mirrors and lens-like structures that would focus sunlight on the polar caps. The result would have been even greater flooding of coastal regions Planetwide, but once sea level had risen, the climate would likely have proven more stable.

Planet Busters

The factions of this era had another means of massive reengineering at their disposal: the dreaded "planet buster" weapons. These horrific weapons were derived from advanced research into Progenitor technology. They were considered the ultimate argument in factional disputes, and also the ultimate atrocity. As long as the U.N. Charter held, any faction using a planet buster could count on becoming the target of a war of extermination, prosecuted by every other faction.

Even the earliest planet busters were many times more powerful than the nuclear weapons that had once been used to wreck Earth. They were capable of devastating areas hundreds of miles across, leaving behind deep craters in Planet's crust. Later models were capable of tearing through to Planet's very mantle, and threatened to convert Planet into a belt of slightly radioactive asteroids.

Rumors of a Final Theory

(TL12: Mission Years 2370-2400)

Always there is the reach for more. Build up more wealth, tear more veils away from the ultimate mysteries, seize more power over your fellow man. More, more, always more to bolster human arrogance. Yet in the end, none of this frantic scurrying after worldly advantage will matter. When a man stands naked before his creator, he will have nothing to show but his soul. - Sister Miriam Godwinson, "We Must Dissent"

As the colonists moved out into space, it seemed at first that their civilization was a completed phenomenon. They had matched and surpassed the accomplishments of their Earth-born ancestors, and their long-term survival seemed assured.

Yet the era proved to be one of great social and philosophical ferment. Humanity appeared to have mastered physical reality; however, the old questions of purpose and destiny remained. Over time, it became clear that the universe still had one

more layer to be discovered and understood - perhaps the most surprising of all.

Exploration

During this period, exploration turned from the outer to the inner world. With all of Planet's secrets apparently known, the colonists began to explore the outer boundaries of sentience and spirit.

The Will to Power (Explore 9)

As *Homo superior* individuals became more common on Planet, many of them embraced the nihilism of Old Earth philosophers such as Friedrich Nietzsche. They championed the natural superiority of "evolved" human forms, and extolled strength, asceticism, and ruthless action.

The Will to Power permits another increase in Telepathy Power. This social movement also permits the Thought Control social choice (p. 125).

Sentient Econometrics (Explore 11)

After the appearance of digital sentience (see below), advanced AI found particular application in the field of economics. The ability of the new computers to model and predict economic behavior led to dramatic increases in the efficiency of the planetary economy. The result was greater wealth and satisfaction for everyone, bringing a much larger proportion of the population into the economic elite. Many bases constructed "paradise gardens": living and recreational areas of extreme opulence made possible only by the new prosperity.

Discovery

There were several breakthroughs in scientific research during this period, especially in the fields of computer design and artificial intelligence. Meanwhile, scientists burrowing deeper into the basic mechanisms of reality uncovered some of the most fundamental secrets of all.

Digital Sentience (Discover 10)

Industrial nanorobotics could also be applied to computer design. The most powerful computers were not yet self-aware, but they could match or surpass the human brain in the areas of reasoning and creative thinking. Computers on the human level of intelligence rapidly became cheap

Dream Twister

Advanced cyborgs were not the only variety of parahuman to elevate raw force to the level of a philosophical virtue. Powerful telepaths also found nihilism attractive, and indeed psionic adepts often proved the most ruthless advocates of the Will to Power. Cyborgs were usually interested in personal excellence or scientific discovery, but telepathic nihilists were more likely to find satisfaction in the domination of lesser minds. Such adepts ceaselessly sought out psionic disciplines that could promote the power of the human mind to control others.

One faction's telepaths went so far as to develop the Dream Twister. This fearsome psionic weapon mimicked and greatly amplified the psionic attack of Planet's native life. Suddenly, human telepaths and tamed mind-worm boils became even more effective on the battlefield.

Dream Twister technology was widely available, but in the end, only one faction actually implemented it throughout its standing military force. The other factions chose not to use it, and regarded it as a terrible perversion of empathic ability. The Planetary Council often debated whether to define mass telepathic assault as a wartime atrocity, but it never passed measures - too many factions were already employing telepaths and captive mind worms in battle (albeit without the deadly force derived from the Dream Twister).

and commonplace, appearing in almost every field of human activity.

With sentient or near-sentient AI appearing in almost every facet of life, some factions began to build societies in which machine and biological intelligence were wholly integrated. All menial, uncreative, and routine tasks were handed over to computers, allowing human beings to concentrate on tasks requiring the most creativity or decision-making skill. The resulting social form was economically efficient and highly adept at further scientific research. Unfortunately, not every human being was able to keep up with machine intelligence, and many citizens were left without useful work to do. Some were content with a life of leisure or artistic work, but many became dissatisfied and restless.

This technology permits computers to be built with the "sentient" option (p. 101). Mainframe computers are now Complexity 9. Digital sentience also permits the Cybernetic social choice (p. 125).

Frictionless Surfaces (Discover 10)

The Unified Field Theory opened the door for scientists to alter some of the fundamental properties of

matter. In the lab, matter could now be "set" to slip past other matter without any resistance from friction in the plane of contact. Other applications led to practical invisibility and other forms of "stealth" technology.

Secrets of Creation (Discover 10)

The Will to Power movement sparked considerable opposition. Social critics claimed that the nihilists were rejecting human values such as gentleness, compassion, and egalitarianism. The precepts of intellectual integrity drove some philosophers to question the basic assertion of nihilism: that the universe has no meaning or purpose other than that which the creative human mind imposes on it. Much to everyone's surprise, in the depths of the Unified Field Theory, there appeared evidence that the cosmos itself has a purpose and may even have had its beginnings in an act of conscious creation. The unraveling of these secrets of creation provoked a scientific and philosophical revolution among the colonists.

Network Backbone

The advances of digital sentience were less qualitative than quantitative. The slow improvement in the intelligence of high-end computers was significant, but the real breakthrough came when even small computers were capable of the same creativity and reasoning ability as the human brain. Planet's cities were suddenly pervaded with highly intelligent machines, always available and ready to help the colonists with their tasks.

One faction went even further, redesigning the entire concept of the digital network by integrating digital sentience into it at every level. These new networks were lightning-fast, efficient, and even *helpful*, actively seeking out and correlating new information for the benefit of their users. Every faction quickly adopted them as part of their own data infrastructures, but the developers of the Network Backbone gained the most significant benefit. Their technical progress

accelerated dramatically, bolstered by information gathered from every research facility on Planet.

One side effect of the Network Backbone was social rather than economic. The new cybernetic society made possible by digital sentience had its drawbacks, particularly when the benefits of computer communion were restricted to a social elite. With the Network Backbone in place, however, *every* citizen had access to the sentient machines. This dramatically reduced social tension and allowed the Backbone's owners to freely embrace the cybernetic society.

In *GURPS* terms, the faction with the Network Backbone has invested heavily in sentient computers, and citizens will find themselves interacting with machine intelligence on a daily basis. The Network Backbone does away with the negative effects of the Cybernetic social choice (p. 125).

Quantum Power (*Discover 11*)

Other experiments led to the ability to derive abundant power from the

quantum-level transactions used by matter. The resulting "quantum chambers" yielded several times as much useful power as the best fusion

power plants, and were equally clean.

In *GURPS* terms, this technology indicates the appearance of antimatter power plants (see Appendix A).

Self-Aware Colony and Nethack Terminus

The partnership of conscious computers and humanity led to some unusual results. One faction turned over a substantial portion of its government to the new generation of computers. The fundamental infrastructure of each base was put in the hands of a powerful self-aware computer, which was encouraged to think of the entire base as its "body." Sophisticated robots, not themselves conscious, were assigned to the base's ruling intelligence to act as an internal work force. Sensors throughout the base were tied into the central sentience. The result was dramatically improved law enforcement and much greater efficiency in the area of basic maintenance. This "self-aware colony" was most attractive to police states, but even the most democratic functions considered the option simply for the vast reduction in base operating costs. In the end, only the one faction went to the extreme of turning all base functions over to machines.

Another faction, more dedicated to covert operations, turned the new conscious computers loose on the global data networks. They constructed a self-aware computer core that was linked to Planet's research networks, assisting all factions in exchanging scientific and economic information. Unknown to the other factions, this Nethack Terminus covertly extracted information for the benefit of its owners, making their entire intelligence apparatus more effective.

These, specialized applications of computer sentience had remarkable consequences. Originally built in pursuit of factional advantage, they eventually played an important role in the fulfillment of human destiny. Both the Self-Aware Colony and the Nethack Terminus became major components of the Planetmind's final structure, in the Era of Transcendence.

Self-Aware Machines (*Discover 11*)

The final development in computer science was the creation of machines that were not merely sentient, but demonstrably self-aware. These machines shared the same physical mechanisms that had long been known to grant consciousness to humans and other biological organisms. They showed all the functions of biological intelligence, up to and including powerful psionic talents.

Aside from further advancing the power of computer networks across Planet, the new self-aware machines found many applications in space. Deep-space probes were launched on years-long voyages to explore the outer reaches of the Alpha Centauri system. Other machines were used to build new industrial facilities on Planet's moons and in the planetoid belt. These facilities could operate indefinitely without human supervision, bringing plentiful resources back to the growing civilization on Planet.

With this development, sentient computers may now be built with telepathic ability (p. 101).

Nano Factory

The spread of nanotechnology revolutionized industrial science on Planet. As the technology of industrial nanorobotics spread, multipurpose "assemblers" became an integral part of the economic structure of every faction. One faction invested heavily in this technology, integrating assemblers into every portion of its logistical structure. A Nano Factory was built in one base - less a center of production than a testing ground for new assembler varieties - and every base set up a system for producing and distributing assemblers to its citizens on demand.

Once the system was in place, civilians could acquire any needed item almost at will simply by interacting with the assembler service. In the field, military units enjoyed a much-reduced logistical "tail," and could repair battle damage rapidly without needing to return to base.

Building

The industrial revolution due to nanotechnology continued, with new manufacturing methods and nano-products finding applications in every field of human activity.

Industrial Nanorobotics (Build 9)

Nanotechnological industries made great strides during this period, leading to further advances in industrial automation. Nanorobots, or "assemblers," were able to produce needed equipment at a fraction of the time and cost required by older methods. The spread of specialized "nanopaste" permitted manufacturing in the field, using materials and components found on site.

Super Tensile Solids (Build 10)

Another application of nanotechnology was a series of materials with astonishing tensile strength. These materials could be used in truly enormous engineering projects, where ordinary materials could not hope to withstand the stresses involved. Massive habitation domes began to appear, miles across and high, under which vast areas could be amended to the Terran environmental model.

Conquest

Weapons systems saw little radical change during this period, although new developments in nanotechnology found military applications. The end of the third Mission Century was a time of fierce conflict between factions, as the remaining leaders each sensed the approaching climax of events.

Matter Compression (Conquer 9)

The production of radically new materials through nanotechnology continued. Nanotech assemblers produced highly compressed power cells



for aircraft and other applications, as well as a superdense armor suitable for a variety of military applications.

Sentient Resonance (Conquer 9)

While working with Progenitor resonance technology, researchers discovered how to embed advanced computer programs and pre-sentient AI within the resonance fields. This gave the fields themselves a limited kind of sentience. Both offensive and defensive resonance applications were much improved by this technique, making resonance lasers self-aiming and giving resonance armor the ability to adapt intelligently to different attack forms.

Sentient resonance, when applied to weapons technology, is equivalent to applying a resonance amplifier (p. 99) to TL12 energy weapons. This technology also heralds the appearance of ultrascanners (p. 108).

Space Elevator

For a long time, the development of space was hobbled by the fact that most of the human race lived at the bottom of a deep gravity well. Rocket engines were powerful but inefficient, which meant that every pound of payload placed into Planetary orbit had a tremendously high cost.

With the development of super tensile solids, an alternative approach presented itself. A small planetoid was moved into synchronous orbit around Planet and used as the base for the construction of a "beanstalk," a set of cables that would eventually stretch all the way to Planet's surface. Once this Space Elevator was completed, it was possible to send payloads into orbit for a tiny fraction of the earlier cost. No longer would loud, inefficient chemical rockets be needed - fusion power plants on the surface could provide the necessary energy with far greater efficiency.

Only one Space Elevator was ever constructed, and it gave the faction that built it an extreme advantage in the development of space. Suddenly, it was easy to send passengers by the thousands or to boost heavy equipment into orbit. Space habitats began to multiply rapidly, leading to a flood of energy and resources back to Planet. The Elevator also had military applications, as its owners seized the "high ground" of space. Large military units could easily be boosted into orbit and dropped anywhere on Planet.

Endgames

The natural conclusion for human history on Planet was the attainment of Transcendence (p. 83). However, the ongoing dispute between factions might well have been resolved long before Transcendence could be reached.

Conquering the World

Naturally, had any one faction conquered every base belonging to its rivals, that faction would have unified Planet under its own banner. The struggle between factional ideologies would likely have continued, but only on the level of political dialogue within Planet's integrated human population.

Cornering the Market

After the development of planetary economics (p. 69), the factions' economies were integrated into a unified whole even when their governments were at odds. This made it theoretically possible for one faction to seize control of Planet's energy and commodity markets. From this position, the political unification of Planet could have been accomplished with ease.

The Supreme Leadership

Around Mission Year 2280, the colonial charter was amended to allow one faction leader to be accepted as the foremost leader of all humankind. Such a position would be similar to Planetary Governorship, but would permanently place all factions under one unified government. The provision required one faction leader to receive 75% of the vote in a special election, under the same rules that applied for a gubernatorial election (that is, each faction having a number of votes proportional to its population).

In theory, once a Supreme Leader was declared, all factions were obligated to fall into line. In practice, a faction could declare itself independent even after the Supreme Leadership was awarded, although such a decision would likely prove suicidal as all "loyal" factions cooperated to bring down the renegade.



End of the Human Era

(TL13: Mission Year 2400 and Later)

We have only to believe. And the more threatening and irreducible reality appears, the more firmly and desperately must we believe. Then, little by little, we shall see the universal horror unbend, and then smile upon us, and then take us in its more than human arms.

- Pierre Teilhard de Chardin, *Datalinks*

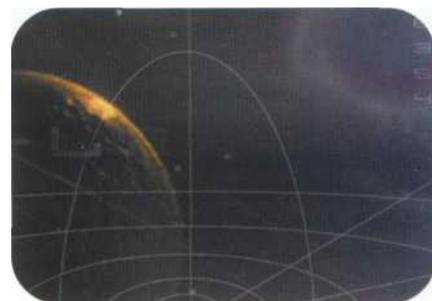
The final era of human colonization of Planet followed the discovery of the fundamental secrets of creation, about MY 2400. During this period, human civilization seemed ready to surpass its historical limits forever.

On the other hand, there were signs that the stimulus of human activity was having a profound effect on Planet itself. Xenofungal mats were on the march, growing with amazing speed across the surface of Planet. Mind-worm boils of astonishing size

and power attacked human cities. Empathic adepts in contact with the Planetmind spoke of the "growth dream," a phenomenon that could be expected to wipe out all complex life on the face of Planet. Humanity might survive such an event, having long since established colonies elsewhere in the Alpha Centauri system, but Planet was still the heart of human society. Could the human race weather the loss of a *second* homeworld?

Exploration

The long trend toward the exploration of "inner space" came to fruition in the Era of Transcendence. Indeed, the very attainment of Transcendence could be considered the ultimate exploration, charting a course for humanity into new realms of sentient experience.



Telepathic Matrix

In the final decades of the Human Era, Planet's telepathic adepts engaged in great conflicts. Those who followed the Will to Power attempted to seize control of minds and souls, and were resisted by those who valued human liberty and dignity. At first, the struggle was one-sided, with the nihilists more organized and ideologically unified. Later, the philosophy of eudaimonia gave freedom-loving telepaths an ideal around which to rally.

Some of these telepaths conceived of and built the Telepathic Matrix, a low-level gestalt of every mind in the population of a single faction. The Matrix operated only on the subconscious level, never controlling a citizen's decisions but bolstering his emotional stability and self-esteem. Members of that faction continued to pursue their individual goals, but they became much less likely "to engage in antisocial or destructive behavior. Drones ceased to riot, and sought peaceful ways to bring up their grievances.

The Telepathic Matrix was a powerful ideological weapon, an argument for those who believed that telepathy could build an enlightened society without violating individual free will. It also proved to be a subtle offensive weapon. Telepaths from the faction that had built the Matrix were able to call on the latent telepathic power of many fellow citizens, increasing their reach and force. This proved most useful in probe-team operations, during which the enhanced telepaths proved to be accomplished spies and agents of subversion.



Eudaimonia (Explore 12)

As telepathic ability spread through the population, a growing consensus followed that rejected the nihilistic Will to Power. The factions that followed this course claimed that every sentient being had its own specific excellence to contribute to society. With a web of telepathic communion binding society together, those excellences could be developed and shared among the entire populace. The resulting social form was named *eudaimonia*, after an ancient Greek word indicating fulfillment and happiness. Under a eudaimonic society, freedom, equality, individuality, and creativity could thrive without the excesses of the Will to Power.

In *GURPS* terms, this technology allows Telepathy Power to be purchased without limit. It also allows the Eudaimonic social choice (p. 125).

Graviton Theory (Explore 13)

Advances in physical science included the discovery of methods for manipulating nature's most tenuous force - gravity. Gravitic forces could be altered, forcing an object to move as if impelled by a "reactionless" engine. They could also be abolished in limited regions, allowing a form of contragravity that negated most or all of Planet's pull. The applications to vehicle design were both immediate and breathtaking.

Singularity Inductor

As the colonists raced toward Transcendence, the vast power of controlled singularities became an almost-irresistible temptation. The new power plants were efficient and had almost unlimited output. They were also tremendously dangerous. A singularity that escaped human control could detonate with the power of a planet buster, or it could fall out of the power plant and begin to devour Planet

In the end, the danger discouraged large-scale development of singularity power - and in any event, the final metamorphosis of Planet came before the new power plants could become widespread. Only one faction invested significant resources in building a series of singularity power plants. The core of the uncompleted project was the Singularity Inductor, an industrial complex devoted to the production of artificial singularities. The Singularity Inductor provided the power needed for a final surge in industrial production in the last few years before Transcendence.

Voice of Planet

In the last years of human habitation on Planet, it seemed likely that the fungal Planetmind would soon awaken into a state of rapid expansion, the so-called "growth dream." Archaeological evidence showed that this would be a disaster, as every previous awakening had failed, killing off most other life on Planet in the process. If the "growth dream" occurred again, then humanity would doubtless survive only in tiny outposts as far from Planet as possible, if it could survive at all.

Desperate to avoid this fate, one faction investigated methods for providing the Planetmind with a more efficient way to think and communicate with humanity. A massive psionic projector was built and tied into the global information network. When completed, it was intended to give the Planetmind direct access to the network, along with all the human knowledge compiled in the Planetary Datalinks.

In the end, the project appeared to be too late. Just as it was being completed, reports came in of massive fungal growth all over Planet, overwhelming many travelers and smaller settlements. Mind-worm boils became active and poured out to attack humans everywhere. In a last-ditch attempt to win a reprieve, the psi projector was activated and the entire contents of the Datalinks dumped into the connection.

The project succeeded beyond anyone's wildest hopes. Within a few minutes, fungal growth stopped and the mind worms retreated. Suddenly, a Voice was heard, not in the subconscious minds of a few individuals, but from the Datalinks themselves. Planet had awakened from its aeons-long dream into full sentience, and was ready to accept at least some humans as partners.

After the completion of the Voice of Planet, the human AI network and the fungal Planetmind were in effect one entity, a unified sentience with godlike intelligence and power. At first, it seemed that humanity had won a miraculous reprieve, but Planet soon corrected this misconception. The growth dream had only been delayed, not prevented. However, with its new clarity of thought, Planet saw a way to protect most humans from the effects of the final metamorphosis ... and a few humans would be invited to join the Planetmind itself in its final Transcendence. The final race toward human destiny had begun.

Graviton theory permits the use of contragrav technology, tractor and pressor beams, gravity-ripple communications, and gravity webs (all from *GURPS Vehicles*).

Threshold of Transcendence (Explore 15)

With the final mastery of physical reality at hand, the human species had arrived at the brink of a new era. Scientists and philosophers alike predicted a great transformation, in which humanity would forever surpass its animal heritage and attain something very much like godhood. In the last few years of human existence on Planet, many people began to prepare themselves for the ultimate change. Members of this Transcend

Movement sold possessions, purified their bodies, and went into the heart of Planet's remotest wilderness in order to meditate alone.

This technology permits the "braintaping" of the human mind, loading human personalities into sentient computers (p. 104).

Discovery

The discovery of the secrets of creation had a variety of implications. As scientists worked to understand the *purpose* behind the Universe, they discovered several of the mechanisms that must have been used during the Creation. These led to new sources of energy and weapons of awesome destructive power.

Secrets of Alpha Centauri (Discover 12)

Working with the most powerful telepathic adepts, the network of self-aware machines made important discoveries regarding the nature of Planet itself. The intricacies of Planet's ecosystems, the workings of the Planetmind, and much of the history of Planet at last became clear. As part of this effort, the colonists built Temples of Planet in many of their largest cities. These were not specifically religious sites, although they had religious overtones. Rather, they were places where telepathic communion with the Planetmind could be pursued and facilitated. The immediate consequence was reduced irritation for the local ecology, but the Temples also became focal points for the final transformation of humankind.

This technology permits mainframe computers to reach Complexity 10.

Singularity Mechanics (Discover 12)

Gravitic technology led to the construction of artificial singularities in Planet's advanced physics laboratories. These "mini-black holes" found application as the most efficient and powerful energy sources so far discovered. Singularity engines provided power for bases and military vehicles alike.

The Progenitor factions found another application for singularity power plants. Using facets of their manifold physics that had been carefully preserved since Planetfall, they began to construct vast communications devices. Their goal was to reach across the light-years and contact other members of their own faction elsewhere in the galaxy. If either faction succeeded, it would bring massive reinforcements to Planet, overwhelming the opposing Progenitors and incidentally eradicating the human species.

Singularity mechanics allow the use of FTL communications and Stardrives (see *GURPS Space or Vehicles*), and lead to the appearance of total conversion power plants (see Appendix A).

Manifold Harmonics

With the discovery of the secrets of the Manifolds, the colonists became aware that they had stumbled into a galaxy-spanning experiment in planetary intelligence. One faction put this information to use in an ambitious attempt to *contact* those other planetary minds, tapping into their unique powers from thousands of parsecs away.

A grand "temple" was built in one city, using an advanced version of the Planetary Energy Grid's core nexus. This facility harnessed a tiny fraction of the Six Manifolds' power, bringing the sponsoring faction into closer communion with Alpha Centauri's Planetmind. The net result was a massive increase in the quantities of nutrients, energy, and minerals extracted from regions containing xenofungus and monoliths. This benefit depended



greatly on how willing the faction already was to work with the Planetmind and in the context of the global ecology. A "green" faction would benefit from the Manifold Harmonics much more than one that ignored the ecology.

In a *GURPS Alpha Centauri* campaign centered on the last years on Planet, the Manifold Harmonics project would be a focal point for fierce competition between factions. The faction completing the project will gain a tremendous advantage in the final race for Transcendence, so rivals will use any means, fair or foul, to sabotage any attempt. The Manifold Harmonics may also tie in to deep-space adventures, since the project reaches across interstellar distances. Side effects might include an FTL "stargate" drive or entry into a galactic-scale communications network.

Era, there was much to be done to build the future.

Secrets of the Manifolds (Discover 13)

Study of the secrets of Alpha Centauri led to a complete understanding of manifold physics, especially as it applied to the design and structure of Planet and its biosphere. The secrets of the Manifolds revealed the meaningful new ways to understand the Planetmind.

Building

Many of the advances in industry during this period were directed toward the eventual surge into Transcendence. Large numbers of colonists indulged in mystic exploration or pure scientific discovery, but the final ascent also required vast engineering work in preparation. Even in the final days of the Human

Matter Editation (Build 12)

The secrets of *matter editation* revealed the ultimate in direct manipulation of physical reality. Using the new technology, the energy levels, electric charge, mass, spin states, and other properties of the most fundamental particles could be controlled. The technique resembled making controlled changes to the entries in a database - indeed, some philosophers speculated that human beings had gained access to the "operating system" of the universe itself.

The new technology had a variety of applications. Industrial-grade neutronium and antimatter could now be produced in bulk. Physical elements could be transmuted almost at will,

ending all shortages of specific materials. There were also applications in biochemistry and medicine.

In *GURPS Alpha Centauri*, matter editation is the development permitting the use of "living metal" materials (see p. VE18). Most of the "magic" nanotechnology described in *GURPS Ultra-Tech* and *Ultra-Tech 2* also becomes available at this point.

Quantum Machinery (Build 12)

The utmost extension of nanotechnology involved the production of quantum-scale machines that could operate on matter and energy almost down to the Planck scale. This led to a revolution in industrial production and energy output.

Matter Transmission (Build 13)

Further developments in matter editation allowed engineers to access more of the "database entries" that defined all material objects. Now, not only could the entries for a particle's properties be changed, but also those for its position and velocity. Soon, even large objects could be moved from one point to another instantaneously and without crossing the intervening space. Before long, "psi gates" were used to teleport living cargo and even human passengers across Planet in an instant.

Temporal Mechanics (Build 14)

Physics states that teleportation through space is equivalent to passage through time; therefore, artificial "temporal fields" allowing the manipulation of time itself were a natural follow-on to matter transmission. Teleportation to past or future moments became possible, leading to "chronoviewers" and a form of "time machine." Stasis generators created zones cut off from the rest of physical reality, in which time passed extremely slowly. These stasis zones proved to be a useful defense, with applications in both military and civil engineering.

Bulk Matter Transmitter

With the discovery of matter transmission, the colonists experienced a revolution in transportation. "Psi gates" made it easy to travel or transport goods across Planet in a fraction of a second, or even out to the most distant space colonies in a matter of minutes or hours.

One faction invested heavily in this technology, creating an extensive network of low-cost telegates for basic transport. Such telegates were too dangerous for the transmission of complex objects such as human beings. On the other hand, bulk goods with simple chemical composition (such as water, compressed air, or refined metals) could be transported directly from the point of extraction to the point of use. This improved industrial efficiency considerably and freed up many resources for more important tasks. The heart of the new network was the Bulk Matter Transmitter, a central node in the telegate nexus.



Clinical Immortality

Medical science continued to attack the problem of aging even after the appearance of the Longevity Vaccine. Eventually, as the colonists attained mastery of matter editation, they discovered ways to hold aging and death at bay *indefinitely*. "Clinical immortality" consisted of a battery of techniques for disassembling the human body and reassembling it whole, healthy, and young - all without losing the continuous thread of conscious awareness. Barring accident, human beings could now expect to live for thousands of years, if not forever. The first faction to develop the technique built a great nanohospital in one of its bases, prepared to offer life-extension treatment to anyone on Planet.

The immediate effect of Clinical Immortality was much like that of the Longevity Vaccine. Internally, the faction that developed the technique enjoyed greater social stability as its populace looked forward to indefinitely prolonged life. Externally, members of every other faction were swayed to lend political support to the owners of Clinical Immortality. This translated into considerable influence in the Planetary Council, especially in matters involving the Governorship or the election of a Supreme Leader (p. 79).

For *GURPS* mechanics covering clinical immortality, see p. 107.

Ascent to Transcendence

No longer mere earthbeings and planetbeings are we, but bright children of the stars! And together we shall dance in and out of ten billion years, celebrating the gift of consciousness until the stars themselves grow cold and weary, and our thoughts turn again to the beginning.

- Lady Deirdre Skye,
"Conversations with Planet"

Preparations for the Planetmind's final metamorphosis constituted the grandest single project ever undertaken by the human species. Stasis generators had to be built to protect genetic material, humans in suspended animation, and large areas of Planet's surface. The planetary computer grid had to be greatly expanded to support the expected processing needs of the Planetmind and to store millions of uploaded human personalities. Robotic industries had to be built for the use of the Planetmind after its transformation. Society had to be prepared for the end of the Human Era.

Every faction still remaining on Planet in those final years contributed to the massive effort. However, one faction had the strongest relationship with the newly awakened Planetmind, and made the most critical contribution. When the final metamorphosis took place, that faction's citizens most effectively impressed their aspirations and ideals onto the transformed Planetmind. Its leaders were invited to become primary selves within the Planetmind's elaborate, multi-layered sentience.

Afterward, human beings continued to exist, but no longer as an independent species. Instead, individual humans acted as symbiotes within the massive Planetary organism, hands and eyes that could venture far from Planet's main body. Transhumans returned to Earth to rebuild civilization there, and explored the galaxy on the Planetmind's behalf. Most humans existed as uploaded personalities within the Planetmind, creating virtual universes of their own in between periods of embodiment.

The era of singular sentience was over, but for the diverse community of life centered on Planet, the adventure was only beginning.

5. Colonists

We must never forget that people are the sole reason for our struggle.

*– Commissioner Pravin Lal,
remarks in Council, Mission Year 2088*

The human settlers of Planet built a society as complex and as diverse as that of Earth. The colonists themselves followed every conceivable profession, including a few that had no Earthly counterpart at all.

Beginning Point Levels: Character point totals for **GURPS Alpha**

Centauri can vary widely. Ordinary 100-point characters will work well in a gritty, low-powered campaign in which adventurers are completely overshadowed by the more over-the-top elements of the setting. The "default" level is 150 points, which will allow individual citizens to play

a significant role in events and interact as near-equals with faction leaders. Cinematic campaigns might feature 200- to 500-point heroes who are able to influence Planet's history and go toe-to-toe with Progenitor adversaries.

Character Types

A variety of character concepts are feasible in an **Alpha Centauri** campaign. It is important to remember that *anyone* may end up in an adventure. Human populations are low, and the struggle against hostile elements and other factions is constant. Few people in Planet's history had the luxury of a quiet, mundane life.

Broodmaster

You are a telepathic adept who is skilled at controlling mind-worm boils. Your occupation is a dangerous one, especially early in Planet's history before the capture of "wild" mind worms becomes common. Many of your colleagues have returned from the depths of a mind-worm boil's telepathic network with a scarred psyche. Others have lost control of their charges and died horrible deaths. Still, you are devoted to your task. Perhaps it's the respect and other rewards that come from your grateful faction - or perhaps it's admiration for the mind worms themselves: powerful, ruthless, primal.

Broodmasters need Telepathy Power, up to the maximum available for the TL. Some might even purchase the Unusual Background necessary to exceed the maximum. Mind Worm Sympathy is a must, and Fearlessness or Strong Will can be useful. Broodmasters often have Military Rank and moderately high Status, especially among "green" factions such as the Gaians or Planet Cult. On the other hand, some broodmasters lose touch with normal human emotions

and social conventions, acquiring Odious Personal Habits, Overconfidence, or even Megalomania. A few withdraw completely from human contact, developing Low Empathy or Shyness.

Basic telepathic skills - Emotion Sense, Mind Shield, Telereceive, Telesend, and Xenoempathy - are all important. Broodmasters also need to understand the lifecycles of their charges, so Biochemistry, Genetics, and Zoology are appropriate. Since mind-worm boils are most often applied in combat, broodmasters need some skill in Tactics and possibly Strategy. Broodmasters do *not* need to be expert soldiers with high Combat/Weapon skills. Ordinary weapons are incompatible with the direction of mind worms, and in any case the broodmaster can expect to be protected by his more mundane counterparts.

Councilor

Sure, everyone in your faction is committed to the ideology of its founders. That doesn't mean that there isn't disagreement on what to do. It also doesn't mean that people don't fight tooth and nail for higher position. You're one of those ambitious people, interested not only in service, but also in leadership. Whether due to ideological commitment, personal vision, or an unabashed lust for power, you are driven seek out positions of greater authority and responsibility. Maybe someday you'll be governor of a base, or even

a member of the faction council itself. Then the others will see the way someone who *knows how* can operate!

Councilors need social advantages such as Charisma and Voice. Strong Will can also come in handy. A senior faction leader as a Patron is useful as well. Successful councilors will have high levels of Rank, Status, or Wealth. Most councilors have a Duty toward their faction or one of its institutions. Other typical disadvantages include Code of Honor, Fanaticism (faction ideology), Jealousy, Overconfidence, and Sense of Duty.

Almost any Social skill will be useful to a councilor, especially Diplomacy, Fast-Talk, and Politics. Councilors usually have at least moderate ability in the skills of a profession valued by their faction (biologists for the Gaians, soldiers for the Spartans, etc.).

Doctor

From the beginning, the colonists have found Planet's environment harsh and unforgiving. Medical professionals such as yourself are constantly working to treat a wide range of conditions, from ordinary injuries suffered during work in high gravity to exotic plagues generated by Planet's native ecology. Almost all colonists have some level of medical skill, but you are a true doctor, an important and highly prized member of society.

Doctors will benefit from Empathy (and possibly some trained telepathic ability) and Strong Will. Those with exceptional Medical skills are usually considered Talents and can expect high levels of Status. Many doctors also hold Administrative Rank due to formal positions within a base's governing structure. Most will possess a Sense of Duty (toward potential patients, or possibly toward all humanity); some have Pacifism as well.

Doctors *require* skill in Diagnosis and Physician; most know Surgery as well. Electronics Operation (Medical) lets a physician use advanced medical equipment. On Planet, medical doctors frequently double as research scientists, and possess some level of Biochemistry, Genetics, Physiology, or Research skill. Psychology is useful for treating mental disorders and understanding the psychic needs of patients. Diplomacy, Fast-Talk, and even Leadership can all come in handy when dealing with patients, their loved ones, and other professionals.

Drone

Every faction has its lower-class laborers - its "drones" - and you're one of them. You don't have any of the fancy education that the upper class values so much. All you have is a strong back and a better work ethic than those over-trained weaklings. Without you, society would fall apart and humankind would die out in the face of a hostile world. Of course, your work earns you no respect and even less reward from your faction . . . but maybe someday the time will come for you to *take* what you deserve.

Drones are usually strong and tough, with advantages such as High Pain Threshold and Toughness. They are likely to have mental disadvantages associated with emotional imbalance: Bad Temper or even Berserk, Intolerance, Jealousy, etc. Most drones have Brawling and skill with

commonly available weapons. Drones are unlikely to have advanced technical skills, but they may have high levels of Craft skills, especially Mechanic.

Engineer

Your faction-mates often think of you as a bit strange. You're more interested in building things than in engaging in pointless disputes over ideology. Still, the man who can make things work is always in demand. At least you're never bored, trying to patch civilization together while the faction leaders do their best to tear it down.

The Gadgeteer advantage is highly appropriate **for** engineers. Mathematical Ability is also handy - especially for those specializing in computers. The stereotypical engineer is short on social graces and likely to have either Overconfidence or Shyness. Engineers need high levels of computer skills; one or more of Architecture, Electronics, Engineer, Mechanic, and Shipbuilding; and possibly a few points in pure-science skills. Most engineers specialize in one area (computers, power systems, vehicle design, etc.).

Flyer

You have realized a long-cherished dream: to return to the air above Planet. You are a knight **of** the skies, living and thinking as one with your high-flying steed, fighting the enemy with honor and panache. On the ground, you are something of a legend, with the admiration of your faction-mates and a personal reputation in the Planetary Datalinks. Sometimes, when you fly at night, you see the stars above you and you're sure that one day even those will be yours.

Flyers often have one or more of 3D Spatial Sense, Acceleration Tolerance, Combat Reflexes, and Intuition. Almost all flyers have moderate to high levels of Military Rank. After TL10(C), most flyers have the Interface Jack advantage, since they use direct mind-to-machine communication rather than hand controls to pilot their craft. Skilled flyers gain a Reputation, which may cross faction boundaries (the worldwide aviation community is small enough that its most prominent members are world-famous). The stereotypical flyer has Fanaticism (for his faction) and Overconfidence.

Flyers need high levels of Electronics Operation (Sensors), Gunner, and Piloting. Many possess the Electronics Operation and Mechanic skills required to maintain and repair their craft.

Librarian

The Datalinks are a mess - they always have been and probably always will be. After all, the *Unity* brought along the sum total of human knowledge . . . and then the first faction fights dropped that priceless jewel on the floor and shattered it into a million pieces. On top of that, people keep discovering new things and writing down new thoughts faster than anyone can keep track of it all. Somebody has to pick up the pieces and put it all in order. That somebody is you. You know your way around the dataspace. You know how all the facts fit together, and you're the one who can dig them up and hand over even those your customer *didn't know he needed*.

Librarians are researchers and data-retrieval experts. Appropriate advantages include Common Sense, Intuition, Mathematical Ability, and Single-Minded. After TL10(C), the Interface Jack advantage is common. The stereotypical librarian has a number of social disadvantages, notably Odious Personal Habits, Overconfidence, Shyness, or Workaholic.

Computer Operation, Computer Programming, and Research are the basic librarian skills. Librarians also need to be experts in one or more subject fields; therefore, they can justify almost any Professional or Scientific skill.

Sailor

Much has changed since humanity lived on Earth, but the sea never changes. You're one of the rovers who knit Planet together with trade and carry the faction's vendettas out to sea. You've seen things and done things that no land-hugger could believe. To you, the faction's ideology is somehow not quite so important - not when you're confronted every day by the unthinking hostile might of Planet itself.

Sailors can make use of a variety of advantages, but Absolute Direction, Alertness, Combat Reflexes, Danger Sense, and Toughness are particularly appropriate. A sailor need not have Military Rank; many sailors are civilians. Sailors often have Intolerance (Land-hug-gers). They have a notoriously exuberant social life while on shore leave, making Compulsive Carousing, Compulsive Gambling, and Lecherousness appropriate.

Sailors *require* skill in Sailor and Seamanship. Most have Boating or Powerboat to handle small craft. The master of a large ship needs Navigation and Shiphandling as well. Many Combat/Weapon skills, and most Engineer and Mechanic specialties, can also be useful.

Soldier

Whether you drive a rover or a suit of combat armor, you're the warrior, the executioner, the sharp edge of faction policy. It's your job to go in, find the required patch of land, stand on it, and disassemble anyone who tries to push you off. Nobody who hasn't been there can understand, and you've gotten tired of trying to explain. Your job isn't glamorous or romantic, and more refined citizens look at you with disdain. Still, you know if it weren't for you the faction wouldn't survive. It's a dangerous world out there, after all.

Physical advantages such as High Pain Threshold and Toughness are actually of little use on the ultra-tech battlefield, where a hit either bounces off your armor or kills you stone-dead in an instant. Soldiers *do* need advantages that help them avoid getting hit - notably Alertness, Combat Reflexes, or Danger Sense. Naturally, some level of Military Rank is required. Almost all soldiers have a Duty. Other typical disadvantages include Code of Honor, Fanaticism (faction ideology), Honesty, Sense of Duty (toward faction or fellow soldiers), Truthfulness, and Workaholic.

Soldiers need Combat/Weapon skills - usually Beam Weapons and Guns specialties - to operate their issued

equipment. Gunner skill is required for infantry support weapons and vehicular armaments. Most soldiers have Savoir-Faire (Military). Other useful skills include Armoury, Electronics Operation (Communications or Sensors), Leadership, and Tactics. Speeder and hovertank crews can use Driving and Mechanic.

Spy

You're a member of a probe team, or perhaps you're a more old-fashioned spy who works alone. It's your job to make sure enemy factions don't steal a political, military, or technological advantage. If you have to steal such an advantage yourself, so be it. You're an unsung hero, and know that even if you avoid an unmarked grave, you'll probably never see the rewards you deserve. That doesn't matter - what matters is victory, and victory is what you can provide.

Many advantages can be useful to the undercover operative: Alertness, Charisma, Contacts, Danger Sense, Intuition, and (especially) Luck. Since espionage in this setting includes a considerable amount of computer intrusion, Mathematical Ability is also helpful. Spies are often Curious. Most have a Duty or a Sense of Duty (to faction), and almost all have an Enemy, a Secret, or both. The spy's life is a stressful one, and can lead to disadvantages such as Insomniac, Light Sleeper, Loner, Overconfidence, and even Paranoia.

Spies who operate mainly in the social realm need skills such as Acting, Carousing, Detect Lies, Fast-Talk, Interrogation, and Savoir-Faire. Technically oriented spies will want skills such as Electronics Operation (Communications, Computers, Security Systems, or Sensors), as well as the combination of Computer Hacking, Computer Operation, and Computer Programming that is necessary to engage in network intrusion.

Terraformer

You're one of the pioneers. You spend long periods away from the safety of any base, building roads, digging mines, setting up solar collectors, and laying out farms. You perform the tasks that turn hostile wilderness into productive countryside. You're also the first to bear the brunt of any attack by native life or hostile humans. Your job is a thankless one, but you don't care who wins the medals back at headquarters - you're satisfied to get to know Planet more intimately than anyone else can imagine.

Terraformers need to be adaptable and self-reliant, with advantages such as Common Sense, Intuition, and Strong Will. They are often poor at social interaction, with disadvantages such as Shyness, Stubbornness, or even Demophobia. Many formers have some degree of Pacifism, and are reluctant to use force even in their own defense.

Terraformers need an Engineer specialty, along with supporting skills such as Agronomy, Geology, or Prospecting. Formers often resemble engineers in their skill selection, with the addition of Outdoor skills such as Naturalist or Survival.

Attributes

Planet's gravity, while higher than Earth's, is not high enough to affect DX, IQ, or HT. However, adventurers should consider investing in above-average ST. A surface gravity of 1.3G makes encumbrance a real concern - especially for soldiers or pioneers who need to carry a great deal of equipment in the field.



Advantages, Disadvantages, and Skills

Advantages

The following advantages either have special significance or work differently in *GURPS Alpha Centauri*.

Administrative Rank see p. C119

Factions that are not under military or religious rule use Administrative Rank to represent position within the government hierarchy. Two systems of Rank are of particular importance.

Some of the *Unity* passengers were members of the U.N. bureaucracy, and were expected to set up the initial colonial government after arrival in the Alpha Centauri system. The senior member of this group was Pravin Lal, with Administrative Rank 6. In a Planetfall campaign, this kind of Administrative Rank is, in theory, senior to the equivalent Military Rank. The Peacekeeper faction retained the U.N. system throughout its history. Some other factions used variations on it.

The University faction had its own formal hierarchy, based on titles once prevalent in Earth-based academia. The highest level in this system was "Academician," equivalent to Administrative Rank 5. In practice, while Prokhor Zakharov was only titled as an Academician, he could be considered to hold Administrative Rank 6.

The appropriate titles are as follows:

Rank	U.N. Title	University Title
1	Assistant Officer	Research Assistant
2	Associate Officer or Second Officer	Associate Professor
3	Principal Officer or First Officer	Professor
4	Senior Officer or Director	Senior Professor
5	Assistant Secretary-General	Academician
6	Undersecretary-General (High Commissioner)	-

Citizens of factions that use Administrative Rank may purchase up to 6 levels of Rank, although in most cases Rank 6 is reserved for a faction leader. Those with Administrative Rank have some level of authority within their faction, but will also have corresponding Duties.

Empathy see p. B20

In the *Alpha Centauri* setting, Empathy is equivalent to three levels of untrained Telepathy Power (see p. B168). At the GM's option, the Empathy advantage may be replaced with Telepathy, Power 3 (with no psi skills) once psionics become known.

Extra Encumbrance see p. C155

This advantage is particularly useful on Planet, as it helps offset the effects of Planet's higher gravity. It becomes available as a genetic modification at TL10(B). At the GM's option, some individuals may have natural Extra Encumbrance in a campaign set at least a generation or two after Planetfall.

Filter Lungs see p. C156

This advantage allows one to breathe normally on Planet's surface without a respirator mask. It becomes available as a genetic modification at TL9(B), although a small number of individuals (notably Prophet Cha Dawn) may have it naturally before then.

Gadgeteer see p. C125

The 25-point version of this advantage is available, allowing "realistic" gadgeteering.

Interface Jack see p. C126

Interface jacks are available at TL10(C). For most equipment, they allow operation without the need for manual controls, and give the user +4 to skill when reaction time is important. There is no bonus to operate equipment which *requires* the use of an interface, however.

Military Rank see p. B22

Military Rank for crewmen aboard the *Unity* followed a naval system:

Rank	Title
0	Ordinary Crewman
1	Petty Officer
2	Chief Petty Officer
3	Ensign or Lieutenant, Junior Grade
4	Lieutenant or Lieutenant Commander
5	Commander
6	Captain

Captain John Garland was the most senior officer aboard the starship. All of the Rank 5 Commanders (Lead Astrogator Ulrik Svensgaard, Chief of Security Sheng-Ji Yang, and Chief Science Officer Prokhor Zakharov) eventually became faction leaders. Military Rank 4 or higher probably should not be available to PCs in a Planetfall campaign.

Naturally, once the colonists reached Planet and began to construct their own military institutions, they began to assign Military Rank to their soldiers and sailors. Late in Planet's history, Military Rank as high as 8 may be available.

Neural Cyberdeck Interface

see p. CI27

The computer intrusion rules in Chapter 6 are based on the streamlined system from *GURPS Ultra-Tech* and do *not* use this advantage. If the GM wishes to use the more elaborate system from *GURPS Cyberpunk*, then this advantage may be available, in which case almost all "netrunners" will have an Environmental Interface (30 points).

Psionic Resistance *see p. B22*

The *Alpha Centauri* setting doesn't seem to include any humans who have strong natural psi resistance. The GM may forbid anyone from taking more than one or two levels of this advantage. Those who wish to be more resistant to telepathic attack should consider investing in Telepathy Power and Mind Shield skill. Of course, this option is only available at a sufficiently high TL, or to those who purchase the Unusual Background needed to circumvent the TL limit (see *Psionics*, p. 91).

Religious Rank *see pp. CI22, CI29*

Both major religious institutions on Planet have systems of Religious Rank:

Rank	Believer Title	Planet Cult Title
1	Novice	Initiate
2	Deacon	Acolyte
3	Minister	Intercessor
4	Elder	Senior Intercessor
5	Bishop	Worm Brother
6	Archbishop	Prophet

Religious Rank higher than 6 is unavailable even late in Planet's history. In general, PCs should be limited to Rank 4. In the Believers' church, high Rank usually requires only mastery of Christian theology and increasing acceptance of administrative responsibility. In the Planet Cult, Rank 3+ is only available if the would-be priest has Empathy or some level of full-fledged Telepathy Power.

New Advantage

The following advantage is unique to the *Alpha Centauri* setting.

Mind Worm Sympathy *10 points*

You have a mysterious affinity with mind worms and similar Planet-born animals. Whenever you are confronted by "wild" mind worms, the GM will make a reaction roll for them. On a Neutral reaction, the worms will ignore you even as they attack those around you. On a Good or better reaction, the worms may actively protect you from harm. These effects hold even if you do not attempt to make telepathic contact with the mind worms (p. 18). If you *do* attempt to contact a mind-worm boil, you suffer no penalties to your Telereceive and Telesend skill rolls. You lose these benefits with respect to a given mind-worm boil if you take any hostile action toward it. You are generally sympathetic toward mind worms and should prevent others from harming them if at all possible.

Disadvantages

Not everyone aboard the *Unity* was chosen on the basis of physical or psychological perfection, but a serious physical handicap was usually enough to disqualify a candidate. Few colonists in a Planetfall campaign should begin with serious physical disadvantages (with the exception of disadvantages that reflect injuries suffered during the *Unity* disaster). Physical disadvantages might be appropriate for colonists who have lived on Planet for some time, or who were born there. In particular, many colonists had no access to advanced medical care immediately after Planetfall, and were subject to crippling diseases or injury.

The following disadvantage requires additional discussion in the *Alpha Centauri* setting.

Code of Honor *see p. B31*

Three new Codes of Honor are appropriate for this setting:
Businessman's Code of Honor: Always fulfill your contracts. Never let anything get in the way of business - any interference with the profit motive does more harm than good. Respect those who can make a healthy profit through legitimate means. This code is appropriate for citizens of mercantile factions, and is particularly common among the Morganites. *-5 points.*

Scientist's Code of Honor: Never lie or falsify results. Never permit your personal desires to blind you to the truth. Always argue using logic and evidence rather than personal authority. Share your knowledge freely with others, and respect those who have a great deal of knowledge to share. This code is appropriate for "honest researchers," and is especially widespread among the University faction. Early in Planet's history, it is an informal code, but after the Intellectual Integrity Movement (p. 63), it becomes a formal ethical system. *-5 points.*

Warrior's Code of Honor: Always be ready to defend your faction with force. Obey superior officers and faction leaders to the death. Be ready to help your fellow warriors when needed, but never expect or ask for help from others. Never surrender, and never accept surrender. This code typifies the "warrior ethic" of Planet's earliest military institutions. It is particularly common among the Spartans. *-10 points.*

New Disadvantage

This disadvantage is unique to the *Alpha Centauri* setting.

Nerve Stapled -25 points

You have been subjected to a neurological procedure designed to make you a calm and loyal member of society. Your ability to maintain a distinct self-image is significantly decreased, and you have difficulty placing your own interests ahead of those of the group. You are also emotionally detached, unable to feel anger or other strong emotions. Unfortunately, this comes at the cost of much of your creative intelligence, and you are only able to do well at tasks that are thoroughly familiar to you.

A nerve-stapling victim loses the Combat Reflexes and Versatile advantages, if he had them, along with the Bad Temper, Berserk, Jealousy, Proud, Self-Centered, Selfish, Solipsist, and Stubbornness disadvantages. He is considered to be Humble (p. CI91) and gains two levels of Weak Will (the point cost of both traits is built into the cost of Nerve Stapled). He has -2 with any task that involves creativity, innovation, or unfamiliar circumstances (GM's discretion).

Nerve stapling is usually only inflicted upon the citizens of police states, where the procedure is used to quell unrest. Since the procedure has a drastic effect on the subject's ability to innovate, most faction leaders are reluctant to use it for fear of losing their technological edge. The procedure wears off, but slowly. Without treatment to reverse the procedure, a nerve-stapled citizen might require several years to recover his natural psychological balance. Those who do recover must buy off this disadvantage.

Taboo Traits

Some racial templates include "taboo traits." These 0-point features indicate disadvantages that are forbidden to characters designed with the template. This represents genetic engineering to suppress negative traits. The following taboo traits are common in the *Alpha Centauri* setting. As well, individual disadvantages are sometimes "taboo" for a particular template.

Genetic Defects: Prohibits attributes more than 2 below the genetic template's average (adjusted by age). Also prohibits the disadvantages Albinism, Bad Sight, Color Blindness, Dwarfism, Dyslexia, Gigantism, Hemophilia, Innumerate, Night Blindness, No Sense of Smell/Taste, Non-Iconographic, Short Attention Span, Tourette's Syndrome, and Weak Immune System.

Mental Instability: Prohibits Chronic Depression, Delusions, Edgy, Extreme Fanaticism, Fanaticism, Flashbacks, Guilt Complex, Kleptomania, Lover's Distraction, Low Self-image, Lunacy, Manic-Depressive, Megalomania, Obsession, On the Edge, Paranoia, Pyromania, Voices, and any Phobia worth -10 points or more.

Unattractiveness: Prohibits an Appearance of Unattractive or worse, Bad Smell, Fat, Overweight, and Very Unfit.

Skills

Several skills merit special consideration in the *Alpha Centauri* setting, or are more appropriate than usual.

Electronics see p. B60

In addition to the usual specialties, Electronics (Power Systems) is common in this setting. This covers the design, construction, and repair of energy banks and other equipment used to store and distribute electrical power.

Engineer see p. B60

There are a number of additional specialties available in the *Alpha Centauri* setting. These allow engineers to design, build, and repair large terraforming projects, as well as the specific items of equipment that they comprise. Specialties include:

Agricultural Terraforming: automated farming equipment, condensers, irrigation systems, and soil enrichers. (Prerequisite: Agronomy.)

Combat Engineering: bunkers, perimeter defenses, and sensor arrays. (Prerequisite: Electronics (Sensors).)

Mining: mines and thermal boreholes. (Prerequisite: Geology.)

Pelagic Agriculture: kelp-farming equipment. (Prerequisite: Agronomy (Pelagic).)

Pelagic Engineering: mining platforms and tidal harnesses. (Prerequisite: Geology (Pelagic).)

Solar Power Systems: solar collectors and echelon mirrors. (Prerequisite: Electronics (Power Systems).)

Esoteric Skills see pp. CI137-145

Most of these skills (*except* the M/H version of Meditation on p. CI142) are inappropriate for an *Alpha Centauri* campaign with a realistic flavor. The GM may allow these skills in a more cinematic campaign. For example, Sheng-Ji Yang was rumored to be a master of several such skills as the result of his expertise in the martial arts.

Free Fall see p. B48

The *Unity* crew was trained to work in zero gravity when necessary, so Free Fall would be an appropriate skill for any adventurer in a Planetfall campaign. It is unlikely to be *useful* once the colonists are stranded on Planet, however!

Judo and Karate see p. B51

Many of the *Unity* crew were trained in various unarmed martial arts. Certain factions (notably the Human Hive, the Nautilus Pirates, and the Spartan Federation) carefully preserved and extended these skills on Planet. Any PC may have some level of these skills. If the GM is using *GURPS Martial Arts*, then he may choose to permit the full range of "realistic" skills and maneuvers from that book. Cinematic skills and maneuvers are conceivable, but leave open the question of where one goes to be Trained by a Master on Planet. . .

Pelagic Skills

In *GURPS Alpha Centauri*, those with Agronomy, Architecture, Biochemistry, Botany, Ecology, Geology, Prospecting, or Zoology skill must specialize in either the normal (i.e., land-based) or *pelagic* version of the skill. This is *required* (as opposed to optional) specialization; see p. B43. The pelagic specialty allows one to work in the undersea environment. In all cases, the normal and pelagic specialties default to one another at -3.

Language Skills *see pp. B54-55*

The *Unity* crew spoke a wide variety of languages, but English was by default the common language of the expedition. On Planet, many of Earth's languages eventually vanished for lack of use. Almost all human PCs should speak English, as a second language at least.

Meditation *see p. C1142*

The "realistic" Mental/Hard version of this skill should be available even in a non-cinematic campaign. It is often learned by martial-artists and psionic adepts, and is particularly useful for xenoempaths (see below).

Mind Block *see p. C1155*

This skill is available - especially after the discovery of Psionics on Planet. It does not provide any defense against Mental Blow, but it can be used by non-telepaths to prevent intrusions via Emotion Sense or Telereceive.

Philosophy *see p. C1157*

At TL8(E), the Philosophy (Ethical Calculus) specialty becomes available. This skill permits the philosopher to use rigorous mathematical principles to reason about ethical individual behavior. As with other Philosophy specialties, the GM may permit a roll against skill to gain insight into the "rightness" of a course of action - although the insight is likely to be stated in terms of symbolic logic or mathematics, not in the form of a mystical parable. This skill can also be used to predict the actions of others who use the ethical calculus. The GM may require Mathematics as a prerequisite for this skill.

Scrounging *see p. B67*

Before disaster struck the *Unity*, the plan was to offload the ship's cargo in an orderly manner, organized with extensive computer catalogs. Things didn't work out that way. Every faction ended up with a tremendous variety of equipment, in great disarray and without any useful inventory. As a result, for years (sometimes decades) after Planetfall, the colonists had to search through piles of uncataloged equipment and personal possessions to find needed items. Under such circumstances, Scrounging was a true survival skill.

Vacc Suit *see p. B69*

As with Free Fall, the *Unity* crew were trained in the use of vacc suits. This skill remains useful even after Planetfall, for use with heavy protective gear.

New Skills

The following skills are specific to the *Alpha Centauri* setting.

Manifold Physics (Mental/Very Hard) No default

Prerequisite: Nuclear Physics-15+

This extremely complex scientific discipline covers the study of the "manifolds" revealed and manipulated by Progenitor science. Applied manifold physics yields near-magical technologies, including unlimited sources of energy, sensors that cannot be jammed or obscured, and FTL communication across galactic distances. This skill is usually available only to scientists who have been in direct contact with Progenitor society. It can also cover study of "alien artifacts" in a campaign in which the Progenitors make no overt appearance.

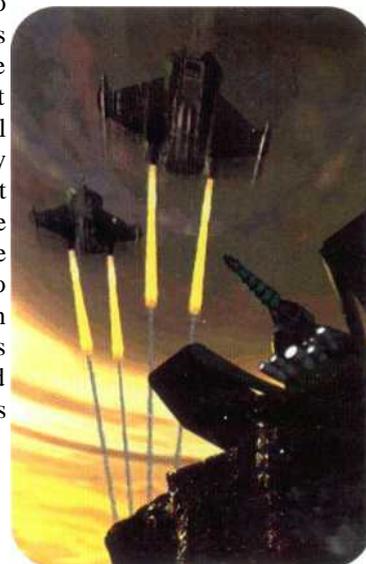
Xenoempathy (Mental/Hard)

No default

Prerequisite: Telereceive at 12+

This psionic skill represents the ability to tap into the "dreams" of the xenofungal mats that cover much of Planet. On a successful skill roll, the telepath will get some idea of the mental state of any xenofungus within his Telepathy range. In particular, he will know whether the fungus is in good condition, whether it is being irritated by human activity, and whether it is preparing to summon mind worms or other symbionts. If Planet is attempting to communicate directly with humans, the xenoempath will know. Planet usually finds it easiest to deal with xenoempaths, although even with them the communication is clumsy, full of dream symbolism and metaphor.

This skill also allows fast travel through xenofungus areas. On a successful skill roll, the xenoempath will be able to communicate his needs to all fungus within his Telepathy range. The fungus will not obstruct his travel; indeed, it will assist him so that he may move as if he were on flat and open terrain. In the round after he makes the skill roll, he will be able to move at full Move within his Telepathy range. This effect can be applied even if the xenoempath is aboard a ground vehicle.



Instead of making skill rolls on a turn-by-turn basis, the telepath may enter a xenoempathic trance. This requires one minute of concentration and successful skill rolls against Xenoempathy and Meditation. Once in the trance state, the xenoempath may not walk or take any other action without breaking the trance (he may be carried or ride in a vehicle). As long as the trance lasts, the xenoempath and anyone in his immediate vicinity may move freely through the xenofungus,

as above. The party's maximum Move in yards per second cannot exceed the xenoempath's Telepathy range. This means that a xenoempath with Telepathy Power 4 is needed for walking, Power 6 for running, Power 8 for movement in a speeder, or Power 9 for movement in a hovercraft. Anything less will limit the party or vehicle to something less than top speed.

Psionics

Psionic talents are essential to the *Alpha Centauri* setting. Early in Planet's history, the colonists discover the secret of telepathic communication. As the centuries pass, natural power increases until some adepts reach godlike levels of talent.

of a gestalt is that of the most skilled member. However, because the minds are linked, all participants in the gestalt jointly suffer any fatigue loss or critical-failure effects.

A gestalt's effective Telepathy Power is equal to that of its most powerful member, plus a bonus based on the *total* Power of all other members. Use the following table to determine the bonus:

Total Power	Power Bonus	Total Power	Power Bonus
1-3	+1	36-48	+6
4-8	+2	49-63	+7
9-15	+3	64-80	+8
16-24	+4	81-99	+9
25-35	+5	100-120	+10

Further increases follow the same progression: the bonus is equal to the square root of the total added Power, rounded down.

Various vectors of Planet's mind worm are particularly accomplished at telepathic gestalt. An individual mind worm almost never has a Telepathy Power higher than 3, but a single mind worm can act as the coordinator for a mass of others within a 1-yard radius. A mind-worm boil can comprise a gestalt of dozens of worms, with an effective Power bonus of + 10 or more!

Psionic Combat

Psionic attackers on Planet use Mental Blow to reduce targets to unconsciousness, after which the victims can easily be captured or killed. Defense involves training in the Mind Shield skill.



Normally, a psionic attack involves massing many attackers using the gestalt technique, building up very high Power so that the Mental Blow will do considerable damage. Mind worms are particularly adept at this, and human combat telepaths imitate this tactic later in Planet's history. If the target has Mind Shield skill, however, his Power is subtracted from the attackers' *skill roll*. This can make even a powerful gestalt helpless to attack a single powerful defender.

Availability

In the canonical *Alpha Centauri* campaign, Telepathy is the only psionic power available (see pp. B165-171 or pp. P20-26). The GM may choose to allow other powers, but these should be less common and more restricted.

Telepathic abilities become available to the colonists as the result of technological advances:

Tech Level	Abilities Available
TL8(P)	Power 3; no skills (equivalent to Empathy advantage)
TL8(D)	Power 5; Mind Shield skill
TL9(E)	Emotion Sense, Mental Blow. Psi Sense, Sleep, Telereceive, and Telesend skills
TL10(E)	Power 8; Xenoempathy skill
TL11(E)	Power 12; <i>all</i> Telepathy skills
TL12(E)	Power 16
TL13(E)	Unlimited Power

Anyone may purchase Telepathy Power or skills that are within the limits implied by the technology available to his faction. A telepath who has "natural" telepathic ability beyond these levels must pay an Unusual Background cost of 10 points for every TL by which his powers anticipate what is generally available.

Telepathic Gestalts

In a *gestalt*, two or more telepaths combine their minds into a single, more powerful whole to focus their Power.

Each individual within the gestalt must have Telesend and Telereceive skills averaging 10 or better. One member of the gestalt must be chosen as its *coordinator*, responsible for holding the massed minds together. Each member of the gestalt must make telepathic contact with the coordinator using Telesend and Telereceive, and the coordinator must do the same with them.

A gestalt can only initiate one telepathic feat at a time, as directed by its coordinator. If the gestalt is using an active skill (such as Mental Blow or Telereceive), then all of its members must concentrate on it. Compute range from the coordinator's position (with enough powerful telepaths, it is possible for a gestalt to be widely dispersed). The skill

Telepathic Matrix Benefits

The Telepathic Matrix (p. 80) represents a great advance in gestalt technique, placing every member of a single faction in constant, low-level telepathic contact with every other. Once the Matrix is completed, the following rules changes apply to members of that faction *only*.

Telepaths no longer need to meet the minimum requirements for Telesend and Telereceive skill to participate in a gestalt, nor do they have to make Telesend and Telereceive rolls to join - they need only be willing and within the coordinator's Telepathy range. In addition, even *non-telepaths* can contribute to any gestalt if they are willing and within the coordinator's Telepathy range. Use the following table to determine the Power bonus yielded by willing non-telepaths:

Non-Telepaths	Bonus	Non-Telepaths	Bonus
100	+1	3,200	+6
200	+2	6,400	+7
400	+3	12,500	+8
800	+4	25,000	+9
1,600	+5	50,000	+10
		x1,000	+10

Attackers may try to batter down a defender's Mind Shield using brute force. This costs an extra 2 fatigue points (plus the usual 2 points, if the attack is a repeated attempt against the same Mind Shield). The attacker may then subtract *half* of his Power from the Power of the defender's Mind Shield.

A telepath with Power 10+ may use Mental Blow as an area-effect attack. The attempt is made at -5 to skill. This attack is treated as a "global" use of telepathy on an area anywhere within the attacker's normal Telepathy range. For example, a telepath with Power 12 could attack an area 4 yards in radius, anywhere within 400 yards. If targets with different levels of Mind Shield power or Psionic Resistance are caught in the area of effect, do not subtract their Mind Shield power or Psionic Resistance from the attacker's skill as normal. Instead, note the amount by which the attacker's Mental Blow skill roll succeeded. If a specific defender's Mind Shield power or Psionic Resistance exceeds that amount, then the attack failed to affect him.

In the *Alpha Centauri* setting, Mental Blow does not merely drive the target toward unconsciousness. In addition to suffering fatigue, the victim experiences nightmarish delusions drawn from his subconscious mind. These may require Fright Checks, at the GM's option. As well, they sometimes have the effect of causing the victim to engage in self-destructive behavior. At the GM's option, anyone reduced to 0 fatigue points by a Mental Blow must make a final Will roll before falling unconscious. If he fails, then he performs some self-destructive act: he may remove his air mask, open up his armor, or otherwise compromise his defenses; he may crash his vehicle; he may even turn his weapon on himself.

The most feared opponents in psionic combat are mind-worm boils. These awesome telepathic gestalts rarely use their massed power to attack a single target at long range, instead attacking multiple targets using an area-effect blast (see above). Mind-worm gestalts are fragile, however, because they have relatively few fatigue points with which to press their attack.

Racial Templates

The following racial templates are available at various points in Planet's history. Each has a TL of introduction and a price that gives the cost of engineering an embryo to that template.

Cyborg 60 points

Attribute Modifiers: ST +3 [30]; DX +1 [10]; HT +1 [10].

Advantages: Combat Reflexes [15]; Extra Encumbrance [5]; Extra Hit Points +1 [5].

Disadvantages: Overconfidence [-10]; Unattractive [-5].

Features: Taboo Traits: Cyber-Rejection, Genetic Defects.

The Cyborg's increased ST does not imply increased height or bulk, as his muscle tissues and skeletal structure have been subtly modified from the normal human structure. Subtract 3 from ST before figuring the Cyborg's height and mass.

Tech Level: TL10(C). **Cost:** \$110,000.

Some faction leaders invested heavily in the production of human variant types designed for warfare. Such super-soldiers were strong, tough, and fast. These variant humans were usually termed "cyborgs," although the usage was somewhat misleading. They were not born with bionic implants, but were often fitted with them (most often an interface jack) later in life.

The Cyborg template is typical of the genetically engineered soldiers of the later era of Planetary warfare. Members of aggressive factions are the most likely to use this template.

Empath 35 points

Advantages: Telepathy, Power 5 [25].

Skills: Mind Shield at IQ [4]; +1 Emotion Sense [2]; +1 Telereceive [2]; +1 Telesend [2].

Features: Taboo Traits: Genetic Defects, Mental Instability.

Tech Level: TL10(E). **Cost:** \$85,000.

As the colonists came to understand psionics, they identified several markers for telepathic talent within the human genome. Genetic engineering and eugenics could emphasize those genes, leading to the production of a race of empaths. Factions that were particularly interested in communication with the native life forms invested heavily in the production of this genetic type.

The Empath template represents a genetic variant on the human norm. Empaths can have children normally with unmodified humans, although their natural telepathic abilities do not always breed true in such cases. The Empath genetic transform is expensive and difficult to produce from scratch, so factions that have invested in it often value bloodlines that reliably yield telepathic ability.

Genejack 25 points

Attribute Modifiers: ST +5 [60]; DX +1 [10]; IQ-2 [-15]; HT+1 [10].

Advantages: Extra Encumbrance [5];

Filter Lungs [5]; High Pain Threshold [10]. *Disadvantages:* Short Lifespan 2 [-20];

Slave Mentality [-40]. *Tech Level:* TL10(C). *Cost:* 75,000.

The social tension between Talents and ordinary laborers was one of the perennial problems faced by every faction. Some factions responded by working to build egalitarian societies. Others simply tried to make their "drone problem" go away by producing variant humans who would be able to work as drones but who would not try to improve their condition.

One such variant was the *genejack*, first produced in the depths of the Human Hive. Genejacks are robust and tireless workers, capable of moving about on Planet's surface without protective gear. They are also utterly incapable of personal initiative, and cannot even conceive of rebellion.

The genejack is a human subspecies, and cannot breed true with unmodified humans. Their short lifespan means that they reach sexual maturity at a very young age, but even so, their numbers seem to increase almost *too* quickly. Rumor has it that in the warrens of the totalitarian factions, retroviral techniques are used to alter *adult* dissidents into docile genejacks ...

Homo Superior 195 points

Attribute Modifiers: ST +1 [10]; DX +1 [10]; IQ +2 [20]; HT +2 [20].

Advantages: 3D Spatial Sense [10]; Alertness +2 [10]; Early Maturation 2 [10]; Enhanced Time Sense [45]; Extra Encumbrance [5]; Extended Lifespan 2 [10]; Fearlessness +2 [4]; Filter Lungs [5]; Immunity to Disease [10]; Intuitive

Progenitor

240 points

Attribute Modifiers: ST +10 [110]; DX +1 [10]; HT +1 [10].

Advantages: 3D Spatial Sense [10]; DR 2 [6]; Early Maturation 2 [10]; Extended Lifespan 2 [10]; Extra Hit Points +5 [25]; Magnetic Sense 12 [60]; PD 1 [25].

Disadvantages: Bad Sight (Nearsighted) [-10]; Hidebound [-5]; Increased Life Support [-10]; Incurious [-5]; Intolerance (Racial) [-5]; Reduced Move (Running)-1 [-5].

Features: Cannot Swim. An average male (ST 20) stands about 7'8" tall and masses about 300 lbs. For every point of ST added or subtracted, add or subtract 1" of height and 10 lbs. of mass. Females stand about 4" shorter and are 40 lbs. less massive than males.

Racial Skill Bonuses: +1 to Electronics (any) [2]; +1 to Physics [2].

If Progenitors actually appear in an *Alpha Centauri* campaign, then they will be formidable adversaries for any human party. The referee should portray them as mysterious, ruthless, and extremely cunning. They do not make good PCs, even in high-level campaigns - although there is some precedent in the setting for a Progenitor who betrays his own people to take up the cause of humanity.

Progenitors are considerably taller and more massive than humans, and have superior physiques. They are physically tough, with armored carapaces and a physiology that can soak up much more damage than the human body. They mature about as quickly as humans, but can expect to live three times as long even without access to advanced medicine. They have a special sense that allows them to detect and analyze magnetic (and some electric) fields at ranges of over one mile. Finally, they have superb spatial and situational awareness.

Progenitors have poor vision compared to humans, and tend to rely on their "magnetic sense" instead. They are not built for swimming, and quickly drown in water over their heads. They also run more slowly than humans. Progenitors require large amounts of food, water, and breathable air each day, consuming about twice what a human would.

Humans find Progenitors to be incurious and inflexible. They have difficulty with creative or innovative thought, and often ignore new experiences. They despise any race other than their own (particularly humans).

Mathematician [25]; Language Talent +3 [6]; Resistant to Poison [5].

Disadvantages: Overconfidence [-10]. *Features:* Taboo

Traits: Cyber-Rejection, Genetic Defects,

Unattractiveness. *Tech Level:* TL11(E).

Cost: \$245,000.

The *Homo superior* variant human type represents the kind of radical bioengineering that was taking place in Planet's transhuman era. This racial template was designed for health, longevity, the ability to live on Planet's surface without life-support gear, and a wide range of superhuman perceptual abilities. Not all of the modifications were genetic. Biomachinery was integrated into the living cells of the new human subspecies, supplementing its natural brain and nervous tissue. The result was a dynamic blend of human and machine intelligence.

Overman: Some factions that subscribed to the Will to Power philosophy (p. 76) developed a *Homo superior* variant intended to dominate and rule "lesser" beings. These "Overmen" were never very numerous, but their sheer force of personality and overwhelming ambition drove them to have a drastic effect on colonial history. Overmen make poor PCs but superb NPC adve

To design an Overman, start with the *Homo superior* template and add Telepathy, Power 8 [40]; Voice [10]; Mind Shield at IQ+1 [6]; and a +2 bonus to Telecontrol skill [3]. Substitute Fanaticism (Faction ideology) [-15] and Megalomania [-10] for Overconfidence.

The Overman template becomes available at TL12(E) and costs 239 points. An engineered Overman embryo costs \$274,000.

Perfect 35 points

Attribute Modifiers: DX +1 [10]; HT +1 [10].

Advantages: Attractive [5]; Disease-Resistant [5]; Longevity [5]. **Features:** Taboo Traits: Genetic Defects, Mental

Instability, Unattractiveness. **Tech Level:** TL9(B). **Cost:** \$50,000.

As Earth suffered social decay in its final century, several nations followed a fashion for eugenics and human genetic engineering in pursuit of various ideals of "perfection." Some of the *Unity* crew were the result of such programs. These "Perfects" were specifically designed to be attractive, healthy, and immune to many physical problems. On Planet, they often gravitated toward leadership roles, although none of the faction leaders were themselves Perfects.

Social Status, Wealth, and Jobs

The workings of society vary widely from one period to the next in Planet's history, and from one faction to the next. The GM must give some thought to how wealth and social status will work in his *Alpha Centauri* campaign.

Status and Cost of Living

The following table can be used once the human colonies are well-established on Planet (by Mission Year 2180).

Status	Examples	Monthly Cost of Living
6	Planetary Governor	\$50,000
5	Faction leader	\$20,000
4	Senior faction official, base governor	\$10,000
3	Important Talent	\$5,000
2	Ordinary Talent	\$2,400
1	Well-to-do citizen	\$1,200
0	Ordinary citizen	\$600
-1	Poor or unskilled citizen	\$300
-2	Drone, criminal or underworld figure	\$150
-3	Nerve-stapled drone, outcast	\$150
-4	Genejack or other "slave" genetic construct	None

The main subtlety here lies in how the generic term "Talent" is defined in practice. A Talent is always a skilled professional who is valued and given a high degree of responsibility by his faction's society. The exact nature of the Talent's profession varies from one faction to the next. For example, among the Spartans, military officers have high Status, while expert biologists and farmers are regarded as ordinary citizens at best.

The Perfect template represents a typical product of the eugenic programs of pre-holocaust Earth. Before it becomes widely available again on Planet, any colonist can justify taking it by assuming that he either is or is descended from an Earth-born Perfect.

Thinker 35 points

Attribute Modifiers: IQ +2 [20]; HT -1 [-10].

Advantages: Intuitive Mathematician [25].

Features: Taboo Trait: Genetic Defects. **Tech**

Level: TL10(C). **Cost:** \$60,000.

The neural-interface technology that permitted the Cyborg design also led to several variant human types that were unusually adept at scientific research. These variants were specifically designed for communion with advanced computers, giving them advanced cognitive and data-processing abilities. They were almost always considered Talents.

The Thinker variant is a genetic upgrade rather than a human subspecies, and can breed normally with unmodified humans. Unfortunately, the children of such pairings often inherit the Thinker's fragile health without inheriting his above-average intelligence and mathematical ability; therefore, Thinkers tend to marry other Thinkers.

Among the Gaians, the reverse would be true. The GM should make sure that the profession of a PC with high Status makes sense given his faction background.

As usual, those who are Wealthy or better get one level of Status for free (see p. B18). Each faction also grants one level of Status per three *full* levels of a specific kind of Rank. For most factions, this award is tied to Administrative Rank, representing one's position within the faction's corporate or governmental structure. Among the Spartans, Status is tied to Military Rank; among the Believers and the Planet Cult, Status is tied to Religious Rank.

Wealth

How wealth works also varies dramatically from one period of Planetary history to the next, and from one faction to the next. Here we will simplify by saying that a colonist's wealth represents the level of resources he can call on as needed. This *may* represent personal ownership of goods. It may also include items assigned by the state, a share of a common pool of equipment, or simply whatever he picks up that no one else is using at the moment.

In a Planetfall campaign, "starting wealth" is \$5,000. This early in Planet's history, no colonist has a settled lifestyle, so the entire allotment of starting wealth may be used for "adventuring" gear. By about Mission Year 2180, starting wealth has risen to \$10,000 and the usual 80% of starting money must be applied toward clothing, a home, and similar items. After the factions have established their "national" states (about MY 2250), starting wealth rises to \$15,000, where it remains for the rest of Planet's history.

Job Table

Job (Prerequisites), Monthly Income	Success Roll	Critical Failure
<i>Poor Jobs</i>		
Outcast* (no qualifications), \$120	10	1d/4d
Scratcher* (Scrounging 10+), \$135	PR	-1i/3d
<i>Struggling Jobs</i>		
Colonist* (Any useful Craft or Outdoor skill 10+; Survival 11 +), \$25 x best PR	Best PR	-2i, 1d/-4i, 4d
Drone (ST 11+), \$300	ST	LJ/5d
Scout* (Beam Weapons or Guns 12+: Survival 11 +). \$30 x best PR	Best PR	-2i, 2d/LJ, 4d
VR Actor* (Acting 10+), \$30 x (PR + reaction bonus)	PR	-3i/LJ, 1d
Writer* (Poetry or Writing 12+), \$20 x best PR	Best PR	-2i/-4i
<i>Average Jobs</i>		
Courtesan* (Sex Appeal 13+), \$50 x PR	PR + reaction modifier	-2i/-4i, 2d
Criminal Enforcer* (ST 13+; Beam Weapons or Guns 12+; Brawling, Judo, or Karate 12+), \$50 x IQ	Best PR-4	LJ, 3d/8d
Engineer* (Engineer 12+), \$50 x PR	PR	-2i/LJ, 3d
Entertainer* (Acting, Musical Instrument, or Singing 12+; Performance 11+), \$50 x (best PR + reaction bonus)	Best PR	-3i/LJ, 2d
Former* (Engineer 11+; Survival 11+), \$60 x best PR	Worst PR	-2i, 2d/LJ, 4d
Journalist* (Research 12+; Bard, Photography, or Writing 12+), (\$40 x best PR) + \$100 per +1 of general Reputation	Best PR	-3i, 1d/LJ, 3d
Lab Assistant (Computer Operation 10+; Research 11+: any science skill 10+). \$150 x (worst PR - 6)	Worst PR	-2i/LJ, 3d
Librarian* (Computer Programming 11+; Research 12+), \$120 x (worst PR - 6)	Worst PR	-2i/LJ, 2d
Missionary* (Bard 10+; Theology 11+; Religious Rank 1+; religious faction), \$50 x best PR	Best PR	-2i/LJ, 3d
Rover Pilot* (Driving (Tracked) 12+; Electronics Operation (Sensors) 11+). \$45 x Driving	Worst PR	-2i/LJ, 4d
Sailor* (Seamanship 11+; any useful Craft skill 10+), \$50 x best PR	Worst PR	-3i/LJ, 4d
Security Officer (Beam Weapons or Guns 12+; Criminology 11+; Law Enforcement or Streetwise 10+). \$55 x worst PR	Worst PR	-3i, 2d/LJ, 4d
Soldier (Beam Weapons or Guns 13+: Tactics 10+; Military Rank 2 or less), \$500 + (\$100 x Rank)	Best PR-2	-2i, 2d/LJ, 6d
<i>Comfortable Jobs</i>		
Administrator (Administration 11+; Status 0+), (\$100 x PR) + (\$200 x Status)	PR	-3i/-4i, LJ
Broommaster (Telepathy, Power 5+; Telereceive 13+; Telesend 13+), \$180 x worst PR	Worst PR+(Power-5)	-2i, 2d/LJ, 6d
Computer Hacker* (Computer Hacking 13+; Electronics Operation (Computers) 13+), \$150 x worst PR	Worst PR	-3i/LJ
Computer Programmer* (Computer Programming 14+; Electronics Operation (Computers) 12+), \$125 x worst PR	Worst PR	-3i/LJ
Corporate Manager* (Administration 12+; Status 0+; free-market faction), \$150 x PR	PR	-3i/-4i, LJ
Diplomat* (Administration 10+; Diplomacy 12+; Status 1+). \$200 x best PR	Worst PR	-2i, LJ/LJ, 2d
Doctor* (Diagnosis 12+; Electronics Operation (Medical) 11+; Physician or Surgery 13+; Status 1+). \$180 x best PR	Worst PR	-3i/-4i, LJ
Flyer (Piloting (High-Performance Airplane) 13+; Military Rank 3+), \$800 + (\$200 x Rank)	PR	-2i, 2d/LJ, 6d
Military Officer (Beam Weapons or Guns 13+: Leadership 12+; Tactics 12+; Military Rank 3+). \$600 + (\$200 x Rank)	Best PR	-2i, 2d/LJ, 6d
Priest* (Bard 11+; Theology 12+; Religious Rank 3+; religious faction), \$100 x best PR	Best PR	-3i/-4i, LJ
Probe Team Member (Acting 12+; Beam Weapons or Guns 12+; Stealth 11 +). \$150 x best PR	Worst PR	-3i, 3d/LJ, 6d
Scientist* (Computer Programming 12+; Research 13+; any science skill 14+), \$125 x best science skill	Worst PR	-3i/LJ, 3d
Ship Captain* (Navigation 12+; Seamanship 13+; Shiphandling 12+), \$140 x best PR	Worst PR	-3i, 3d/LJ, 4d
Wakener* (Artificial Intelligence 13+), \$150 x PR	PR	-3i/-4i, LJ
<i>Wealthy Jobs</i>		
Base Governor/Faction Official* (Administration 13+; Politics 13+; Status 4+), \$10,000 x (Status - 3)	Worst PR	-3i, LJ/LJ, prisor
Corporate Executive* (Administration 13+; Leadership 12+; Status 3+; free-market faction), \$5,000 x (best PR - 12)	Worst PR	-4i/-5i, LJ
VR Celebrity* (Acting, Bard, Musical Instrument, or Singing 13+; Status 1+), \$400 x (best PR + reaction bonus)	Best PR	-5i/LJ, 2d

Jobs

The *Job Table* lists some typical occupations. These are especially applicable after colonial society is well established (around MY 2180). See pp. B192-194 for instructions on how to use a job table.

Certain jobs require that the worker be a member of a particular type of faction. In factions that do not operate on the free-market system, the GM may rule that jobs marked "freelance" are actually for fixed rates of pay, if they are available at all.

6. Hardware

The brain and the hand. Each is insufficient by itself, yet together they pulled Man out of a million years of animal existence and gave him the universe. The two create a cycle of advancement: the brain conceives, the hand builds, and the brain is thus enabled to conceive more widely.

– Academician Prokhor Zahkarov, “For I Have Tasted The Fruit”

This chapter covers some of the weapons, armor, gadgets, and vehicles that saw use during Planet's history. For more items (or more detailed rules covering many of the items given here), see *GURPS Bio-Tech*, *Psionics*,

Ultra-Tech, *Ultra-Tech 2*, and *Vehicles*. GMs are also encouraged to develop distinctive equipment for their own *Alpha Centauri* campaigns, using the material presented here as a guide.

Weapons

During the human settlement of Planet, the colonists used a bewildering variety of weapons against one another. Those listed here are typical of the personal weapons used by the colonists. GMs who own *GURPS Vehicles* may wish to design more.

Shredder Side Arms (TL8(P))

The *Unity* crew were provided with side arms for security and police duties, and against the possibility of hostile native life forms at journey's end. These "shredder" weapons were hopelessly inadequate for inter-factional warfare. They were also expensive, based on Gauss weapons technology that was difficult for the colonists to produce after the disaster of **Planetfall**.

Laser Weapons (TL8(C))

Laser weapons were among the first to be developed for combat duty on Planet. The first laser cannon and side arms were adapted from the laser mining drills shipped with the

colonists aboard the *Unity*. Later lasers grew steadily more powerful, eventually becoming the workhorses of the battlefield. These included the TL9 "Gatling" lasers, TL11 "fusion" lasers (X-ray lasers), and TL13 "quantum" and "singularity" lasers (gamma-ray lasers). Laser weapons were also the first to be fitted with the *resonance amplifier* (p. 99).

Flame Guns (TL8(C))

The constant need to defend against mind-worm attacks encouraged the development of flame-throwing weapons. At first, the colonists experimented with projectors throwing flammable liquids, but this approach proved insufficient against a determined mind-worm boil. Eventually, there appeared the "flame gun": a

TL Progression Exceptions

Many of the "standard" futuristic technologies that appear in other *GURPS* sourcebooks are modified in the *Alpha Centauri* setting. For details of the differences, see Appendix A. All items listed here use the extension to the standard *GURPS* tech level system described in Chapter 4 (see p. 55).

If the GM wishes to develop new equipment, then he should set its TL and assign it to whichever sector of technology seems appropriate. Most weapons systems will fall under Conquer. Armor, standard vehicle components, industrial equipment, and most medical equipment will fall under Build. Psionic equipment will usually fall under Explore. Computers, sensors, and scientific equipment will generally fall under Discover, with some coming under Explore. There are many exceptions to these guidelines; in *Sid Meier's Alpha Centauri*, it is not always obvious why a given technological advance was assigned to one sector rather than another.

weapons system that projected bursts of superheated plasma. These weapons were short-ranged, but their ability to spread flame over wide areas made them ideal for combat against native life forms.

In *GURPS* terms, flame guns are "flamers," or plasma-beam guns. A flame-gun burst lasts for one second. The dice rolled for damage may be divided among targets, so long as all targets are in the same arc of fire (p. B121). If the targets are more than 1 hex apart, 1d of damage is lost for every empty hex.

Flame guns do *full damage* against mind-worm hordes (see p. 16), so long as the plasma burst is "walked" across the horde and no dice of damage are wasted on empty hexes. The wash of plasma can injure or kill even an armored target, unless his armor is totally sealed and airtight. Unsealed armor protects with only 1/2 its DR against a flame-gun attack. The plasma can also melt armor. For every 10 points of damage done (before subtracting DR), the armor loses 1 point of DR on the location hit. A sealed suit loses integrity (becomes unsealed against the next flame-gun attack to that hit location) if it loses 20% or more of its original DR.

Paper, cloth, and wood automatically ignite if hit by a flame-gun discharge. Flammable plastics and similar materials catch fire if their DR is exceeded. Ignited items will burn until extinguished. Successive shots continue to do damage to a burning object.

Impact Weapons (TL8(C))

After experimenting with Gauss and laser weapons, most factions returned to the tried-and-true technology of chemical slugthrowers. Planet's nitrate-rich environment made the production of advanced propellants simple, and late-TL8 methods produced weapons more robust and powerful than had ever appeared on Earth. Best of all, the new weapons systems were both cheap and easy to maintain, making it possible to arm large military formations quickly for the first time.

The new generation of chemical slugthrowers were called "impact"

weapons, and this term later became common for *any* weapon that worked by hurling a simple physical projectile. Impact weapons were the mainstay of Planet's military institutions for many years. Long after more powerful weapons were deployed, military units and police garrisons continued to use impact weapons for defensive applications.

Gauss Weapons (TL10(C))

Gauss weapons reappeared on the battlefield at TL10(C). As the available technology and industrial base were once again able to produce Gauss systems at a reasonable cost, several factions produced a class of "electromagnetic impact" weapons to supplement the chemical slugthrowers that were already popular.

Tachyon Bolt Weapons (TL11(C))

Charged-particle accelerators might have been applied as weapons early in Planet's history, but as it happened, they did not see widespread use until TL11(C). At that point, the new technique of controlled tachyon bursts was applied to produce a devastating beam weapon. The new tachyon-bolt projectors had poor armor-penetration capacity, but they could do so much damage on a hit that this hardly mattered.

Plasma Shard Weapons (TL11(D))

Improvements in plasma technology at TL11(B) gave rise to one of the most common weapons systems of the last years of the colony. These "shard" weapons were significantly more advanced than the flame guns of earlier history. They heated plasma to fusion temperatures and ejected the resulting bolt down a tunnel evacuated by a preliminary laser pulse. Shard weapons were somewhat more powerful, more compact, and longer-ranged than the earlier tachyon-bolt systems. They were also more expensive, but this did not deter military institutions from investing in them wholesale.

A shard weapon does burn damage and knockback to the target, and splatters plasma over the target area. Anyone within 2 yards of a shard-weapon strike will take 25% of the weapon's full damage.

Graviton Guns (TL13(E))

The gravitic technologies that appeared at TL13(E) were often applied to weapons systems. The colonists developed several grav slugthrowers, completing the development of "impact" weapons. However, the most devastating weapons of the gravitic era were graviton guns. These weapons fired small packets of coherent gravitic energy. Once generated, these packets decayed quickly, but within their range, they could do massive damage even to well-protected targets.

Weapon Accessories

Laser Sights (TL8(P)): All personal ranged weapons are assumed to have built-in laser sights. This gives +2 to Acc, and reduces the Snap Shot penalty to -1 at ranges of up to 50 yards and to -2 at 51 to 100 yards. Snap Shots are still at -4 at ranges over 100 yards. The sight can be tuned to use an infrared laser beam, invisible without an IR vision system (such as multiview goggles, p. 108). The user of a weapon may choose not to use his laser sight, especially if he believes the enemy is using laser detectors (p. 100).

Head-Up Display (HUD) Sights (TL8(P)): Any rifle or carbine can be fitted to connect to a user's HUD interface (p. 97). When the connection is activated, a targeting reticle is displayed on the HUD, which shows the wearer exactly where his gun is pointing. This reduces SS number by 2. If a laser sight is also being used, the HUD display will project distance to target, and the user may add half his weapon's Acc (rounded up) to his roll when making snap shots. To get the full Acc bonus, the user must still take a full turn to aim. Adding HUD sites to a weapon costs \$500.

Personal Weapons Table

GAUSS WEAPONS - GUNS (NEEDLER) [GUNNER (GAUSS GUN) FOR TRIPOD VERSIONS]

Weapon	Malf	Type	Damage	SS	Acc	1/2D	Max	Mass	aMass	RoF	Shots	ST Rcl	Cost	TL
Shredder Pistol	Ver.	Imp.	1d	9	3	130	1,200	0.3	0.06	8	200/A	7 0	\$4,200/\$11	8(P)
Shredder Carbine	Ver.	Imp.	2d	9	5	240	1,800	1.9	0.4	20	1,200/B	7 0	\$5,200/\$36	8(P)
Gauss Pistol	Ver.	Cr.	6d(2)	9	5	340	2,600	1.3	0.3	3~	40/2A	8 -1	\$1,200/\$22	10(C)
Gauss Rifle	Ver.	Cr.	9d(2)	12	9	600	3,500	11	8	12	1,140/C	10 -1	\$1,500/\$157	10(C)
Gauss Support	Ver.	Cr.	15d(2)	17	12/14	1,100	5,100	52	29	20	3,800/D	14T -1	\$4,500/\$690	10(C)

LASER WEAPONS - BEAM WEAPONS (LASER) [GUNNER (BEAMS) FOR TRIPOD VERSIONS]

Weapon	Malf	Type	Damage	SS	Acc	1/2D	Max	Mass	aMass	RoF	Shots	ST Rcl	Cost	TL
Laser Pistol	Ver.	Imp.	1d+1	10	13	1,900	3,800	3.3	0.5	3~	20/C	7 0	\$780/\$100	8(C)
Laser Rifle	Ver.	Imp.	2d	14	15	2,400	4,800	19	5	8	128/D	9 0	\$1,800/\$500	8(C)
Laser Support	Ver.	Imp.	4d	20	15/20	3,300	6,600	56	5	12	66/D	12T 0	\$5,100/\$500	8(C)
Gatling Pistol	Ver.(Crit.)	Imp.	3d-1	9	14	2,600	5,200	2.7	0.5	3~	18/C	7 0	\$1,400/\$ 100	9(C)
Gatling Rifle	Ver.(Crit.)	Imp.	4d	12	15	3,200	6,400	16	5	8	128/D	9 0	\$2,800/\$500	9(C)
Gatling Support	Ver.(Crit.)	Imp.	8d	20	15/21	4,500	9,000	44	5		66/D	HT 0	\$7,800/\$500	9(C)
Fusion Pistol	Ver.(Crit.)	Imp.	4d(2)	9	12	1,200	2,400	2.7	0.5	3~	16/C	7 0	\$480/\$100	11(D)
Fusion Rifle	Ver.(Crit.)	Imp.	6d(2)	12	15	1,500	3,000	16	5	8	100/D	9 0	\$930/\$500	11(D)
Fusion Support	Ver.(Crit.)	Imp.	12d(2)	20	15/19	2,100	4,200	44	5		54/D	HT 0	\$2,600/\$500	11(D)
Quantum Pistol	Ver.	Imp.	13d+2(5)	9	14	2,300	4,600	1.7	1	3~	9/2C	7 0	\$4,500/\$200	13(B)
Quantum Rifle	Ver.	Imp.	6dx5(5)	12	15	4,500	14,000	14	10	4	23/2D	8 0	\$6,900/\$1,000	13(B)
Quantum Support	Ver.	Imp.	6dx10(5)	20	15/22	9,000	27,000	64	20	4	29/E	13T 0	\$35,000/\$2,000	13(B)
Singularity Carbine	Ver.	Imp.	15d(10)	9	14	2,300	4,600	6.9	5	3~	26/D	8 0	\$2,800/\$500	13(C)
Singularity Rifle	Ver.	Imp.	6dx5(10)	12	15	4,500	14,000	19	10	3~	14/2D	9 0	\$4,900/\$1,000	13(C)
Singularity Support	Ver.	Imp.	6dx10(10)	20	15/22	9,000	27,000	77	20	4	17/E	14T 0	\$23,000/\$2,000	13(C)

FLAME GUNS - BEAM WEAPONS (FLAMER)

Weapon	Malf	Type	Damage	SS	Acc	1/2D	Max	Mass	aMass	RoF	Shots	ST Rcl	Cost	TL
Flame Pistol	Ver.	Spcl.	4d	10	15	150	300	3.2	0.5	1	10/C	7 0	\$1,500/\$100	8(C)
Flame Rifle	Ver.	Spcl.	8d	12	15	210	420	8.2	1.5	1	16/3C	8 0	\$2,100/\$300	8(C)

IMPACT WEAPONS - GUNS (LIGHT AUTOMATIC, PISTOL, OR RIFLE) [GUNNER (MACHINE GUN) FOR TRIPOD VERSIONS]

Weapon	Malf	Type	Damage	SS	Acc	1/2D	Max	Mass	aMass	RoF	Shots	ST Rcl	Cost	TL
Impact Pistol	Ver.(Crit.)	Cr.	3d(2)	9	3	180	1,800	2	0.5	3~	9/A	9 -1	\$980/\$11	8(C)
Impact Rifle	Ver.(Crit.)	Cr.	6d(2)	12	8	390	2,800	10	4.6	12	120/A	11 -2	\$1,400/\$19	8(C)
Impact Support	Ver.(Crit.)	Cr.	9d(2)	17	11/13	890	4,500	51	25	20	400/A	14T -1	\$3,800/\$62	8(C)

TACHYON BOLT WEAPONS - BEAM WEAPONS (BLASTER) [GUNNER (BEAMS) FOR TRIPOD VERSIONS]

Weapon	Malf	Type	Damage	SS	Acc	1/2D	Max	Mass	aMass	RoF	Shots	ST Rcl	Cost	TL
Tachyon Pistol	Ver.	Imp.	6dx6	9	9	360	720	2.6	0.5	3~	10/C	8 -1	\$1,400/\$100	11(C)
Tachyon Rifle	Ver.	Imp.	6dx12	12	14	510	1,000	8.2	1.5	4	16/3C	9 -1	\$2,100/\$300	11(C)
Tachyon Support	Ver.	Imp.	6dx24	17	15/16	860	2,600	41	5	8	20/D	13T -1	\$7,200/\$500	11(C)

PLASMA SHARD WEAPONS - BEAM WEAPONS (BLASTER) [GUNNER (BEAMS) FOR TRIPOD VERSIONS]

Weapon	Malf	Type	Damage	SS	Acc	1/2D	Max	Mass	aMass	RoF	Shots	ST Rcl	Cost	TL
Shard Pistol	Ver.	Spcl.	6dx5	9	9	760	2,300	2.1	0.5	3~	4/C	7 0	\$7,900/\$100	11(D)
Shard Rifle	Ver.	Spcl.	6dx10	12	14	1,100	3,300	10	5	4	20/D	8 0	\$11,000/\$500	11(D)
Shard Support	Ver.	Spcl.	6dx25	17	15/16	1,800	5,400	47	20	8	70/E	HT 0	\$32,000/\$2,000	11(D)

GRAVITON GUNS - BEAM WEAPONS (FORCE) [GUNNER (BEAMS) FOR TRIPOD VERSIONS]

Weapon	Malf	Type	Damage	SS	Acc	1/2D	Max	Mass	aMass	RoF	Shots	ST Rcl	Cost	TL
Graviton Pistol	Ver.	Imp.	2d(100)	10	10	530	1,100	5.3	0.5	3~	13/C	8 0	\$3,900/\$100	13(E)
Graviton Rifle	Ver.	Imp.	4d(100)	14	14	740	2,200	17	5	3~	66/D	9 0	\$6,000/\$500	13(E)
Graviton Support	Ver.	Imp.	7d(100)	20	15/17	1,200	3,600	55	5	4	25/D	12T 0	\$20,000/\$500	13(E)

Improvements at Higher TLs

All of these weapons improve with tech level. Beam weapons get extra shots from their power cells equal to 50% of the listed number of shots per TL after introduction. Slugthrowers (impact and Gauss weapons) get 20 more shots per magazine per TL after introduction. In addition, for each tech level after introduction, energy weapons (beam and Gauss weapons, but not impact weapons) get +1 damage per 1d of damage they already inflict, and +10% to their 1/2D and Max ranges. Unlike number of shots, damage and range only increase for the first three TLs after the weapon's introduction.

Resonance Amplifiers (TL9(C))

Progenitor resonance technology found some strange applications. Among the strangest was the "resonance amplifier," an accessory for heavy beam weapons that gave them added striking power against *telepathic* targets.

Any laser or blaster weapon can be modified to use a resonance amplifier - although personal weapons (rifles and pistols) rarely receive such modification in practice. The amplifier's

mass is 25% that of the unmodified weapon (based on *unloaded* mass, which can be calculated for personal weapons by subtracting aMass from Mass). Minimum mass is 20 lbs. at TL9(C), 10 lbs. at TL10(C), and 5 lbs. at TL11(C) and higher. A resonance amplifier costs \$100 per pound of mass.

If a weapon modified with a resonance amplifier damages its target, then the resonance field "riding" on the beam will be able to take effect. This field interacts harmfully with

the resonance field of a telepathic organism (any organism with a Telepathy Power of at least 1, whether trained as a telepath or not, including those with the Empathy advantage), damaging its nervous system and causing excruciating pain. The effect is one additional point of damage per 1d of damage dealt by the weapon. This extra damage does *not* help the weapon to penetrate DR! The unmodified weapon damage must penetrate DR before extra damage can occur.

Defenses

The colonists initially relied on armor for protection. Later developments made defensive energy fields available, although advanced materials kept armor in use until the end of the Human Era.

Armor

Armor on Planet improved rapidly with materials science. Scouts and probe teams continued to use lighter, more flexible kinds of armor long after heavier armor was standard issue for military forces.

Monocrys (TL8(P))

Light armor useful for situations where discretion is required. Provides full protection against cutting or crushing attacks, but only PD 1, DR 2 against impaling attacks. Since monocrys is flexible, any "6" rolled for damage indicates one hit that gets through the armor regardless.

Monocrys Armor

Type	PD	DR	-Vest- Mass	Cost	-Suit- Mass	Cost
Light	2	8	3	\$400	7	\$1,000
Medium	2	16	5	\$600	12	\$1,500
Heavy	2	24	7	\$800	16	\$2,000

Synthmetal (TL8(B))

Standard body armor for soldiers. Provides PD 4, DR 40 over the torso; PD 2, DR 12 over the arms, hands, and legs; and PD 3, DR 15 on the feet. The helmet has PD 4, DR 18, except for the visor, which has only

PD 2, DR 10. Add 10 to the DR of all locations for each TL above TL8(B). Synthmetal armor can be broken down into individual components. Jacket: 23 lbs., \$270. Gloves: 2 lbs., \$30. Pants: 10 lbs., \$140. Boots: 5 lbs., \$70. Helmet: 8 lbs., \$240. The complete suit masses 48 lbs. and costs \$750. If the entire suit is worn, including the helmet, it is considered sealed but not pressurized against vacuum.

Silksteel (TL9(B))

This body armor provides PD 6, DR 65 over the torso; PD 6, DR 50 over the arms, legs, and feet; and PD 5, DR 25 on the hands. The helmet has PD 6, DR 50, except for the visor, which has only PD 4, DR 35. Add 15 to the DR of all locations for each TL above TL9(B). The complete suit masses 60 lbs. and costs \$2,550. If the entire suit is worn, including the helmet, it is considered sealed. With the addition of a life-support pack (2.5 lbs., \$750) and air tanks it can function as a vacc suit.

Powered Armor (TL10(B))

A powered, armored exoskeleton. Provides PD 6, DR 100 over the torso and PD 6, DR 75 over the limbs and head. The gloves and faceplate have only PD 6, DR 50. The armor is laminated to resist shaped-charge warheads - double its DR against them. Add 50 to the DR of all locations for each TL above TL10(B).

The suit's exoskeleton gives the wearer ST 29. The unit's 225-lb. mass does not count as encumbrance, but the sum of the unit's mass, the user's mass, and any equipment carried may not exceed 550 lbs. The wearer makes any DX-based skill rolls at -1. If the suit loses power, the user can still move - but in this case, the suit's mass *does* count as encumbrance!

The suit's helmet has the all of the accessories described under *Helmet Options* (below), as well as a built-in, voice-activated personal computer (p. 101). The suit is airtight and pressurized, and includes a life-support pack, a 24-hour food and water supply, a waste-relief system, and a 12-hour air tank. It also has chameleon armor, infrared cloaking, and laser sensors (see *Armor Accessories*, below). A rechargeable E cell powers the suit for 14 hours. The complete suit costs \$91,000.

Armor Accessories

Chameleon Armor (TL10(D)): This system changes color and pattern to match any background. Vision rolls to spot the wearer or hit him with a visually aimed attack are at -6 (-3 if he is moving). The system also suppresses the wearer's heat signature, giving -3 to IR spotting and targeting. The system works for 24 hours on a set of 3 A cells. \$1,850, 10 lbs.

Helmet Options: Most military combat helmets include a HUD display, a voice-activated short-range communicator with scrambler, and a chin-activated multiview visor. These systems run for 6 months on a single C cell. This package adds 2 lbs. to helmet mass and \$2,000 to cost. At TL10(C) and above, a neural interface module (p. 102) can be added at the usual cost.

Infrared Cloaking (TL9(C)): This system blends the wearer's heat signature into the background, giving a -3 to infrared spotting and targeting, and a -10 to the to-hit roll for IR-homing missiles. IR cloaking works for 24 hours on a pair of A cells. Every 6 hours, the cloak must be turned off to allow it to vent excess heat, or the suit will become very uncomfortable (1 extra fatigue point every 10 minutes) and after another hour will begin leaking heat anyhow, making it an excellent target. IR cloaking can only be added to a suit of sealed armor. \$1,500, 5 lbs.

Intruder Armor (TL10(D)): This system distorts light around the wearer, rendering him nearly invisible. Vision rolls to spot the wearer or hit him with a visually aimed attack are at -10 (-6 if he is moving). This bonus is not cumulative with that for chameleon armor. \$12,000, 8 lbs.

Laser Sensors (TL9(C)): A web of optical sensors designed to detect the touch of a laser sighting beam and alert the wearer (usually with a warning tone inside his helmet). This gives him +1 Dodge versus any ranged weapon attack that uses a laser sight, and allows a Dodge roll even when he is surprised or being attacked from behind. The attacker can always turn off his laser sight (losing its benefits). The sensors work for 3 months on a B cell. \$2,000, 2 lbs.

Thermal Superconductor Armor (TL11(E)): A thin layer of thermal-superconducting material, capable of absorbing and reradiating electromagnetic energy, applied over other armor. This option can be applied to standard combat armor suits or to any other sealed suit. It halves the damage done by lasers, flame guns, plasma shard weapons, or shaped charges

before the suit's DR is subtracted. It has no effect on other types of beam weapons or on projectile weapons. \$5,000, 5 lbs.

Force Fields

Force screens and deflectors first become available at TL11(B). In the *Alpha Centauri* setting, they are available for personal use right away.

Probability Sheath (TL11(B))

A *probability sheath* is a personal deflector shield. The generator is worn on a belt. When activated, it creates a form-fitting field. The field provides PD 6 *instead* of the PD of any armor worn below it.

The field protects against attacks from any direction. It covers the user and any clothing or armor worn under the belt. Items picked up in the hand will not be covered unless enclosed in the palm (thus, weapons can be used normally). The field fits like a glove over the wearer's hands or gauntlets, and does not impede movement or the manipulation of objects.

The probability sheath does not allow gas to pass through, so the wearer must have his own life-support system. The field can be set to "flicker," allowing gas to pass through but reducing its PD to 5. Control of the belt is by a switch or by voice commands. The belt runs for 5 minutes on a pair of C cells (twice that if "flickering"). \$5,000, 2 lbs.

Photon Wall (TL11(B))

A *photon wall* is a photonic field that acts as armor. It absorbs electromagnetic and kinetic energy, but is transparent to non-coherent visible light and harmless frequencies of sound. It will not react to physical objects moving at less than a walking speed. A man could reach through a photon wall, but not run through it. The wall stops only *incoming* energy; the wearer can shoot out through one without difficulty.

Photon walls have DR but no PD; use the PD of a probability sheath or armor. This DR is effective against

physical blows, explosions, projectiles, and beam-weapon attacks. Energy beams will be absorbed, melee attacks will hit an apparently solid wall, and projectiles that fail to penetrate the wall will lose their kinetic energy and fall to the ground. Shaped-charge explosions, advanced lasers, and graviton guns all reduce the effective DR of a photon wall just as they do that of normal armor, but AP bullets and flamers do *not* halve DR.

In the *Alpha Centauri* setting, photon walls are considered to be *rigid* force screens. They are effectively DR that can be switched on and off, and they cannot be "overloaded" by successive attacks.

A photon wall blocks active sensors and any kind of communicator reception, as no energy can penetrate the screen. The wearer can use a scanner or communicator from *inside* without difficulty.

A *personal photon wall* provides DR 100, plus DR 50 per TL after TL11(B). It runs for 15 minutes on a C cell. \$5,000, 2 lbs.

A *backpack photon wall* provides DR 250, plus DR 125 per TL after TL11(B). It runs for 1 hour on a D cell. \$25,000, 25 lbs.

A *heavy photon wall* can be used to protect a campsite or vehicle. It generates a 5-yard radius field with DR 500, plus DR 250 per TL after TL11(B). Individuals behind a heavy photon wall can also be protected by their own personal or backpack photon walls. The generator runs for 5 hours on an E cell. \$100,000, 75 lbs.

Photon walls can be fitted with *safety switches*. A safety switch will detect any incoming attack slower than the speed of light, and turn on the photon wall to protect its user. This conserves power and protects against sneak attacks. The safety switch activates automatically against melee, arrow, or thrown weapon attacks. Against high-speed projectiles, it activates on a 14 or less on 3d. It cannot detect beam attacks in time to stop them, but it switches on automatically after a beam attack passes through the protected area. A safety switch costs \$1,000.

Computers

Computer technology was central to humanity's business on Planet. Computer processing power is rated abstractly in terms of *Complexity*. Each Complexity level represents at least a tenfold increase in processing power and memory storage over the previous level. A system's Complexity determines what programs it can run, and how many.

Programs also have a Complexity rating. A program of given Complexity can only be run on a computer of equal or greater Complexity. A computer can run two programs of its own Complexity level simultaneously, *or* 20 programs of one Complexity level less, *or* 200 programs of two Complexity levels less, and so on. For example, a Complexity 2 computer could run two Complexity 2 programs, *or* 20 Complexity 1 programs, *or* one Complexity 2 program and 10 Complexity 1 programs.

All computers have voice-instruction capability. Computer Programming rolls are not required for casual use, and Computer Operation rolls are at +3 as long as the voice interface is working.

Computers are also rated for their data-storage capacity in terabytes (TB). One TB is roughly 1,000 gigabytes (GB) or 1 million megabytes (MB); see *Databases* (p. 102). Additional data can be stored using external disks.

Hardware

The following standard computers are available. Interface devices are not included in these cost and mass figures. Mass, cost, and Complexity are given as of TL8(P). Mass and cost are halved at TL9(D) and again at

TL10(D). Complexity increases by 1 at TL9(D) and again at each TL thereafter.

Hardware Options

Compact: The computer is substantially reduced in size and mass. Multiply mass by 1/2 and cost by 2.

Dedicated: The system provides built-in computing capacity for a single device. It runs only one program, which is hardwired and cannot be changed. Start with a general-purpose computer with Complexity equal to that of the program, multiply mass by 1/2 and cost by 1/5, and then add the cost of the program.

Dumb: The computer is less sophisticated than usual (this may represent older equipment). Multiply cost by 1/5 (by 1/20 for tiny or personal computers) and reduce Complexity by 1.

Genius: The computer is cutting-edge technology. Multiply cost by 7 (by 20 for tiny, personal, mainframe, or macroframe computers) and increase Complexity by 1.

Hardened: A hardened computer system is immune to electromagnetic pulse (EMP) effects that would destroy an ordinary system. Multiply mass by 3 and cost by 5.

High-Capacity: Both the number of programs that can be run by the computer and its data storage capacity are increased by 50%. Multiply cost by 1.5.

Neural Net: The computer is built to simulate the way an animal (or human) brain structure works. This allows it to learn from "experience," programming itself over time. It has an effective IQ of Complexity+4. Combined with the "robot brain" option, this gives the computer limited self-initiative. Multiply cost by 2.

Pre-Sentient: At TL10(D) and higher, any computer of Complexity 6+ can be made pre-sentient. It is effectively as intelligent as a human being, capable of logical reasoning and "creative" thought. It has an effective IQ of Complexity+5, but it is *not* self-aware. Its human "partners" may think of it as a personality, but it is usually not given any civil rights. Multiply cost by 3.

Robot Brain: The computer is optimized to control a vehicle, robot, or piece of industrial equipment. Without this option, a computer *cannot* learn DX-based skills. The computer has an effective DX of (Complexity/2)+8 and an effective IQ of Complexity+3. It is programmed to obey its owner and will follow instructions literally. The drawback is that the number of programs it can run is *halved*. Mass and cost are unaffected.

Sentient: At TL12(D) and higher, any computer of Complexity 8+ can be made fully sentient. Such a system is self-aware, and is usually treated as a citizen by its faction. As with a pre-sentient computer, it has an effective IQ (on tasks it isn't programmed for) of Complexity+5. Multiply cost by 5.

Telepathic: Any sentient computer can be designed to have Telepathy Power. Maximum Power is equal to (Complexity-6) x 5. For example, a TL 12 mainframe, with Complexity 9, could have Power 15. Each level of Telepathy power adds \$50,000 to the basic cost of the computer.

If more than one cost or mass multiplier applies, then multiply cost or mass by each multiple in turn (e.g., a dumb, high-capacity tiny computer would cost \$200 x 1/20 x 1.5 = \$15).

Computer Table

Computer	Mass	Cost	Complexity	Data Storage	Description
Macroframe	4,000	\$2 million	6	100,000	Primary computer for a faction.
Mainframe	500	\$200,000	5	10,000	Major control or research computer.
Microframe	200	\$40,000	4	1,000	Minor control or research computer.
Minicomputer	40	\$15,000	3	100	Household or small-office computer.
Personal	2	\$1,000	2	10	Individual's data assistant.
Tiny	0.5	\$200	1	1	Integrated into weapon, bodysuit, or other device.

Interfaces

All computers are assumed to have a voice interface, and can be connected to a HUD to display visual information. The personal computer has a small keypad and screen, and at TL10(D) or higher can generate a holographic display of substantial size. For any additional interfaces, add one or more of the following.

Personal Interface (TL8(P)): A peripherals package that includes a keyboard, monitor, modem, and printer, suitable for a portable desktop terminal. \$300, 20 lbs.

HUD Interface (TL8(P)): A "head-up display" mounted in a helmet or pair of goggles, displaying visual information by projecting it directly onto the user's field of vision. Computers and most other pieces of electronic equipment can be connected to a HUD by a short cable or communicator link. Sensor or instrument readings can therefore be displayed directly to the user, giving him +1 with skills such as Driving or Piloting where quick reactions are important (GM's discretion). The goggles do not allow for user input to the device; for two-way communication, use normal controls, a VR rig, or a neural interface. A set of HUD goggles will run for a year on an A cell. \$500, 1/2 lb.

Basic VR Rig (TL8(P)): A set of goggles and gloves that allows the user to operate the computer via a virtual keyboard. User can access VR programs that do not require a full VR suit. A computer must be Complexity 2+ to support this kind of interface. \$1,000, 2 lbs.

Basic VR Suit (TL8(P)): As a basic VR rig, but also includes motion sensors that are attached to various points on the body. This lets the user move around in virtual reality and have a "body" there, but he gets tactile sensation only in his hands. \$1,200, 5 lbs.

Full VR Suit (TL8(P)): Helmet, gloves, and bodystocking that block out the real world and allow the user to concentrate on VR. The suit transmits tactile contact to the user's entire body, although the sensation is crude and includes no sense of heat or cold. A computer must be Complexity 3+ to support this kind of interface. \$2,500, 30 lbs.

Deluxe VR Suit (TL8(P)): As a full VR suit, but offering a much higher degree of sensory discrimination. The suit can transmit smells, temperature variations, and subtle tactile sensations. Erogenous zones can be stimulated, allowing VR sex. A computer must have Complexity 4+ to support this level of interface. \$10,000, 32 lbs.

Neural Interface Module (TL10(C)): Any computer or computerized device can include a neural interface module. A user with a neural interface implant (p. 106) can then connect himself to the computer by a thin, flexible cable. This links his nervous system directly to the device, allowing him to interact with and control it without a keyboard or display. This gives him +4 with any skill involving interaction with the computer, if quick reactions are an issue (GM's discretion). \$500, negligible mass.

Total VR (TL10(C)): A neural interface can stimulate the user's senses in a manner indistinguishable from reality. The degree to which the user can feel pain depends on the safety protocols in place (although the user cannot be *injured*). A neural-interface user must run his own VR Manager program in order to use a VR environment (see p. 104).

Media

Software and data are stored on memory units called *disks*. At TL8(P), a disk is about 3" across and holds 10 GB (or *gigs*) of data. At TL9(D), disks become dime-sized, with the same capacity. Disks remain the same size at later TLs, but storage capacity increases by a factor of 10 per TL. At all TLs, blank disks are \$5 apiece, with negligible mass.

Software

Computer programs are required to put any computer to good use. The following section describes the most common program types.

Databases

A database is a collection of information in computer-readable form. All databases have built-in search and indexing programs (treated as

Complexity 1). For a database of a given size, the wider the subject it covers, the less detail it has. The size of a database is measured in gigabytes. Some representative databases:

Lengthy novel	0.01 gig
1,000 hours low-fi or two hours hi-fi audio	1 gig
20 minutes video	1 gig
50,000 low-res graphics or 40 high-res graphics	1 gig
Complete dossiers on 100 people	1 gig
Complete factional road atlas	1 gig
One year's financial records for a business	1 gig
Plans of 100 simple or 10 complex vehicles	1 gig
Detailed global navigation charts	100 gigs
Public or school library	100 gigs
City or college library	1,000 gigs
Big city or university library	10,000 gigs
Large university or copyright library	100,000 gigs

Intrusion and Counter-Intrusion Software

These programs are used to engage in or defend against computer intrusion. They are usually custom-built and more expensive: determine cost as explained under *Software Costs* (p. 105), and then *double* it.

Defense: This program does not prevent intrusion, but goes into action if an intrusion attempt is detected. A Defense program has an effective skill of Complexity+11. Minimum Complexity is 3 (skill 14). Roll a Quick Contest of Skills between the Defense program's skill and the Computer Hacking skill of the intruder. If the intruder wins, he escapes, and may try to enter the system again later (although the system's owners will be warned next time). If the Defense program wins, it pinpoints the location of the intruder's terminal and alerts human security forces.

An *Active Defense* program has an effective skill of Complexity+8. Minimum Complexity is 6 (skill 14). If an Active Defense program wins the Quick Contest of Skills mentioned above, then it will insert a Virus program (p. 103) into the intruder's system.

Computer Hacking

Computer intrusion was an important factor in Planetary history. Probe teams almost always included intrusion experts, and one entire faction devoted itself to hacking as a fine art. Adventurers will often find themselves wishing to attack (or defend) a critical computer system.

The first requirement is access to the target computer system itself, whether through a communicator or an actual terminal, using a Datalink program (p. 105). A totally self-contained system cannot be penetrated from outside - but few systems (except military defense-control systems) are totally self-contained. For example, an intruder trying to gain access to a corporate computer network could disguise his incoming signal as a priority message from a friendly source.

Once the intruder is accepted as a legitimate user of the system, he can try to gain access to its databases or programs. Some databases are open to any user, while others require special passwords and are defended by Security programs (see below). For instance, once inside a military installation's computer system, a user will have access to dozens of separate databases. Some will be unrestricted, such as the public-relations biographies of senior officers. Others, such as the program controlling the installation's recognition monitors, will have limited access, and will trigger Defense programs if they detect unauthorized access attempts.

Any attempt to break into a secure database or program * requires a roll against Computer Hacking. This roll is at +4 if using a neural interface. A Worm program (see below) will give the intruder a bonus, while a Security program (see below) defending the target database or program will give him a penalty. The GM may add bonuses of up to +5 if the intruder has obtained passwords or codes that provide partial access to the target.

Each attempt takes one hour. Success means that any defenses are unlocked, and the intruder is *inside*. If he was trying to break into a database, he can now alter, erase, insert, or retrieve information. If he was trying to get into an

existing program, he can now attempt to reprogram it. Failure by 1 or 2 means that the attempt failed; a repeated attempt is allowed, but will take another hour. Failure by 3 or more indicates that the target system's defenses (if any) have been triggered.

GMs with access to *GURPS Cyberpunk* may wish to use the more elaborate system in that book. Those rules are geared toward more "cinematic" hacking - which is entirely appropriate for the *Alpha Centauri* setting.

The Hunter-Seeker Algorithm

Computers owned by the faction holding the Hunter-Seeker Algorithm (p. 68) are automatically protected from intrusion. Attempts to break into a program or database running on one of the faction's computers are made at -8 to skill. As well, all of the faction's computers are treated as if they were running a Defense program at the computer's Complexity level; for example, a TL10 personal computer (Complexity 4) would have the equivalent of a Complexity 4 Defense program, with an effective skill of 15. These features are free and *do not count against the computer's program load* - they are part of the basic operating system of the machine.

Computers belonging to the protected faction may also run more advanced Security or Active Defense software, but these programs *do* count against the program load. The automatic penalty to intrusion attempts does not "stack" with any other software being run on the same computer, so if the owner is running a better Security program to protect one of his databases, he only gets the benefit of the Security

The GM will have to rule on whether computers protected by the Hunter-Seeker Algorithm will work for factions other than the one owning the Algorithm. This isn't the case in the *Alpha Centauri* computer game.



Security: A program assigned to protect a particular database or program against unauthorized access. Typical Security programs erase everything stored in the computer, or

change random pieces of stored information (-4 to all skill rolls). Minimum Complexity is 2. A Security program augmented by the computer, or can give -8 to the program. More sophisticated programs might subvert the target computer, turning it into a spy for their creator.

any hacking attempt against protected software. Add -1 to this penalty per +1 to Complexity.

Virus: These are special programs that may be used to infect other programs or databases. If an infected program is loaded into a computer, or if a Virus program is inserted into a system by an Active Defense program, then all programs on that computer will become infected, and can pass it along if copied.

A basic Virus program is Complexity 2, but the GM may rule that advanced viruses, or those designed to attack higher-Complexity computers, are of higher Complexity. In particular, for +1 Complexity, a virus may be *targeted* to get into a specific system (or type of system) and change specific pieces of data.

Worm: A program that assists computer intrusion. Minimum Complexity is 3. A Complexity 3 Worm gives +2 to any Computer Hacking roll for an intrusion attempt, or provides a skill level of 12. Add +1 to both per +1 to Complexity.

Persona Simulations

Most computers in the *Alpha Centauri* setting can communicate in highly idiomatic spoken language. To the casual user, they appear to have a generic "personality." In most cases, this behavior pattern is extremely limited and predictable. To demonstrate a greater depth of behavior, a computer must run a *persona simulation* program.

At Complexity 4, a persona simulation is quite simple. In character terms, it might have up to five quirks and perhaps a single mental disadvantage. Its behavior will still be predictable, but it will take hours of interaction before the simulation's patterns are familiar.

At Complexity 5, a persona simulation begins to resemble a living human mind. It will have quirks and mental disadvantages, and will be able to simulate a wide range of emotional behavior. Its behavior will be much the same toward any user, however, and after several days of interaction, its patterns will become familiar.

At Complexity 6, a persona simulation can be modeled on an actual person, mimicking his social and emotional behavior. Its behavior will change depending on whom it is interacting with, and will also change over time. After several weeks of use, the simulation will be about as familiar and predictable as a living acquaintance.

At TL13(E), it becomes possible to record or "braintape" the actual memories and personality of a living person. This requires the destructive analysis of the patient's brain; therefore, the procedure is usually done only when biological death seems inevitable. Once the recording is made, the patient's memories and mental habits are stored in a 1,000-gigabyte database. At this point, a Complexity 8 persona simulation can be designed to act as the patient's surrogate.

By itself, the simulation will react as the patient would have during life. If the simulation is given access to the memory database, it will remember everything the patient knew in perfect detail. A Complexity 8 persona simulation, run in tandem with a memory database on a *sentient* computer (p. 101), is the patient for all intents and purposes. Late in Planet's history, many

thousands of people "migrated" into the planetary computer network in just this fashion.

If left to themselves, pre-sentient and sentient computers usually develop their own personalities through interaction with their "wakeners" (trainers) and users. These are equivalent to consciously designed persona simulation programs, and can be recorded and copied normally.

Skill Programs

Expert Systems: These are programs with an expert's knowledge of a particular skill, such as Biochemistry or Survival (Arctic). They can be asked what-if questions, but they are unlikely to bring any new insights to a problem, and cannot be used for original research or invention. Expert System programs are available for all Professional and Scientific skills, and for Diagnosis, Intelligence Analysis, and Survival. At Complexity 3, an Expert System has an effective skill of 12 for a Mental/Average skill, 11 for a Mental/Hard skill, and 10 for a Mental/Very Hard skill. Add +1 to skill per +1 to Complexity. These levels are used in place of the user's own skill, but the time required to use a skill with such assistance is *doubled*.

Robot Skill Programs: These are databases and expert systems that give a computer with the "neural net," "pre-sentient," "robot brain," or "sentient" option a specific "pre-packaged" skill. The computer uses the skill itself, provided that it has the appropriate input/output devices or robotic equipment. Computers without the "robot brain" option may only learn mental skills. The degree to which the computer will show creativity or initiative when using its skills depends on its level of sentience. The more points the program grants, the higher its Complexity:

Robot Skill Program Table

Points	Complexity	Points	Complexity
0.5	1	2	3
1		2	
		3 - 4	4
		5-8	5

Complexity is +1 per additional 8 points (or fraction thereof).

Because computers have perfect recall, points placed in mental skills count quadruple; multiply character points *after* calculating the Complexity and cost of the program. Social skills are at -3 if run on a computer that is neither pre-sentient nor sentient. Regardless of skill points, no skill program's skill level can exceed that of the programmer (as set by the GM). This serves to limit computers to levels of skill attainable by human beings.

VR Software

For multiple users to interact within a shared virtual reality, they must run a *VR Manager* program on a computer they can all access. A program capable of supporting basic VR for up to 10 people is Complexity 2. It is Complexity 3 for full VR, Complexity 4 for deluxe VR, and Complexity 5 for total VR. Add +1 to Complexity for every factor of 10 users; for example, a total-VR manager for 100 users would be Complexity 6. Anyone accessing a VR environment through a neural interface must also run his own copy of a VR Manager program.

VR environments are stored in databases, which can be accessed by the VR Manager program. Typical storage requirements are:

Virtual character	1 gig
Virtual room	1 gig
Empty outdoor area (per square mile)	5 gigs
Virtual apartment	10 gigs
Virtual house or park	100 gigs
Virtual mansion	1,000 gigs
Virtual street or mall	10,000 gigs
Virtual neighborhood	100,000 gigs
Virtual city	1 million gigs
Virtual world	1 billion gigs

These figures assume extremely lifelike imagery, indistinguishable from reality. At 10% of these storage requirements, a VR environment will have visual quality comparable to a high-resolution computer display, and many minor details will be "generic." At 1% of these requirements, the simulation will be cartoon-like.

Miscellaneous Software

Datalink: This enables a computer to use a cable or communicator to link with another electronic device - computer, portable radar, scanner, etc. Almost all computers have universal jacks for attaching other devices. This program lets the computer display data from the other device on its screen, and can be used to give instructions through the link. This is also the program used to communicate with other computers through communication networks. Complexity 1.

Targeting: Used with fixed or vehicular weaponry, this program grants a bonus to the skill of a human gunner. At Complexity 1, the bonus is +2; add +1 to this bonus per +1 to Complexity. The number of guns that can be aided at once is limited only by the system's capacity; each gun requires a separate copy of the program in memory (of course, only one copy has to be *bought*). The computer must have the sensors and connections necessary to provide targeting data to the program (see **GURPS Vehicles** for more details).

Software Costs

The cost of software depends on its Complexity and the current TL:

Complexity	Tech Level						
	8(P)	9(D)	10(D)	11(D)	12(D)	13(D)	
1	\$100	\$20	\$5	Free	Free	Free	
2	\$400	\$50	\$10	\$5	Free	Free	
3	\$4,000	\$200	\$25	\$10	\$5	Free	
4	\$10,000	\$2,000	\$100	\$25	\$10	\$5	
5	\$100,000	\$5,000	\$1,000	\$100	\$25	\$10	
6	\$1 million	\$50,000	\$2,500	\$1,000	\$100	\$25	
7	\$10 million	\$500,000	\$25,000	\$2,500	\$1,000	\$100	
8	NA	\$5 million	\$250,000	\$25,000	\$2,500	\$1,000	
9	NA	NA	\$2.5 million	\$250,000	\$25,000	\$2,500	
10	NA	NANA	\$2.5 million		\$250,000	\$25,000	
11	NA	NA	NA	NA	\$2.5 million	\$250,000	
12	NA	NA	NA	NA	NA	\$2.5 million	
Database (per gig)	\$1,000	\$100	\$10	\$1	\$0.1	\$0.01	

NA indicates that software of that Complexity is not available at the TL.

Free indicates low-Complexity software that has effectively become "freeware," available for the cost of copying it onto a blank disk.

These are *typical* costs; the actual cost of a program or database can vary widely as a function of utility and scarcity. A standard encyclopedia database suitable for casual use might well be freeware even at TL8. A persona simulation based on the braintape of a dead faction leader would be priceless.

Equipment

This section covers a variety of useful gadgets. Each item is listed with its TL of introduction, its cost, and its mass (multiply by 1.3 for its weight on Planet's surface).

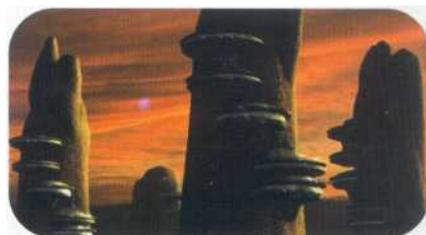
Communications

Communicators (TL8(P))

The following radio communicators are available at TL8(P). Multiply range by 10 at TL9(B), by 50 at TL10(B). At TL9, medium- and long-range communicators have video displays at no extra cost. At TL10, three-dimensional holographic displays are used.

Implant Communicator: This is implanted in the user's skull and powered by an AA cell, which lasts 10 years. It has an effective range of 10 miles. With practice, users can subvocalize, communicating without moving their lips (IQ-4 to notice someone in the same room doing this). The unit

costs \$500, plus another \$500 for the surgery. Each implant system requires a master unit, which costs \$1,000 and weighs 5 lbs. It includes a dedicated computer that assigns frequencies and routes messages through the implants. Each master can control up to 100 implants. The master uses a B cell, which lasts for a year of steady use.



Short-Range Communicator: This is a handheld radio communicator the size of a TL7 cigarette lighter. It has an effective range of 10 miles. It may also be linked into a larger comm net to reach vidcoms or other radio communicators. It may be built into a helmet, watch, locket, etc. at an additional 10% to cost. It uses an A cell, which lasts a year of steady use. \$50, 1/8 lb.

Medium-Range Communicator: This unit is larger, the size of a man's palm. It has an effective range of 100 miles and can be linked into a comm net. One B cell powers the unit for a year of steady use. \$200, 1 lb. At TL8, a communicator with video display is available but twice as expensive.

Long-Range Communicator: This unit is carried on a shoulder strap; it is the size of a desk dictionary. It has an extensor mike and a headset for private listening. It has an effective range of 1,000 miles, and can reach satellites or Starships in standard orbits. A B cell powers it for three months of steady use. \$600, 10 lbs. At TL8, increase cost by \$100 if a video display is included.

Cellular Phone: After TL8(D), any communicator registered with a faction's comm net can function as a cellular phone. The monthly bill is \$20; individual calls cost \$0.25 per minute. Calls to the comm nets of other factions may or may not go through, depending on the current state of diplomatic relations.

Other Communications Technology

Digital Camera (TL8(P)): Takes full-color still or motion pictures. Images are stored digitally, with 40 high-definition images, or 50,000 images at the quality of an early 21st-century TV picture, per gigabyte. At TL9(D) and up, images are three-dimensional holograms. Runs for one month on a B cell. \$500, 2 lbs.

Newscam (TL8(P)): Similar to a digital camera, but incorporating a laser rangefinder (+2 to Photography rolls), a televiewer lens, and a parabolic microphone (+5 to Hearing rolls at up to 200 yards range). Resembles a rifle, and is dangerous to use around counter-sniper teams. \$2,500, 7 lbs.

Progenitor Translator (TL8(E)): Not a language translator, but a device that modulates ambient sound in a manner that Progenitors will hear and interpret as language. It will also analyze the sounds produced by a Progenitor voice box and decode them into phonemes that the human brain can interpret. Humans and Progenitors must still learn one another's languages to be able to communicate; the translator exists only to make it easier for each side to hear the other. \$1,000, 5 lbs.

Recorder (TL8(P)): Records sound for digital storage. Two hours of high-quality stereo sound, or 1,000 hours of low-quality monophonic sound, can be stored per gigabyte. \$175, 1 lb.

Covert Operations Gear

Autograpnel (TL8(P)): Fires a grappling hook up to 50 yards. A motor winch on the gun lifts up to 400 lbs. of weight at up to 5 yards per second. One C cell is good for 100 ascents or descents. \$400, 6 lbs.

Chameleon Cloak (TL10(D)): A large cloak that can be wrapped around a person or object to conceal it, as long as it remains motionless (+5 to Camouflage skill, plus the effects

of a chameleon suit). Larger chameleon cloaks can be used as camouflage nets for vehicles or heavy equipment. The personal cloak will run for 24 hours on 2 A cells; it is \$1,500, 4 lbs. A vehicle-sized cloak covers 25 square yards, running for 12 hours on a B cell; it is \$4,000, 20 lbs.

Chameleon Suit (TL10(D)): A chameleon suit has the same effect as chameleon armor (see p. 99), but is only PD 0, DR 1. It works for 24 hours on 3 A cells. \$1,850, 10 lbs.

Com Tap (TL8(P)): This device can tap into any optical or electronic cable line. It consists of a 100-yard, hair-thin optical cable ending in a clip head, connected to a briefcase-sized unit that includes a monitor and a recorder. An Electronics Operation (Communications) roll is required to tap into a line without damaging it (-3 to tap optical cable). \$3,000, 4 lbs.

Electronic Lockpick (TL8(P)): Sensor/decoder which gives +3 to Lockpicking and Electronics Operation (Security Systems) skills when attempting to break any electronic lock of its own TL or less. Works for 6 months on an A cell. \$1,500, 3 lbs.

Intruder Suit (TL10(D)): An intruder suit has the same effect as intruder armor (see p. 100), but is only PD 0, DR 1. \$8,000, 12 lbs.

Laser Listening Device (TL8(Pj)): This device bounces a laser beam off a solid surface, detecting and translating the vibrations set up in the surface by nearby voices or other sounds. Can be used through a window, and can be hooked up to a recorder or other digital equipment. Works for 8 hours on a C cell. \$1,200, 12 lbs.

Nanobug (TL10(D)): Similar to a programmable bug (see below), but the bug and its recorder unit are integrated and quite small. \$500, negligible mass.

Programmable Bug (TL8(P)): Pinhead-sized audiovisual sensor head, connected by a 100-yard hair-thin cable to a recorder unit. Can be programmed for voice activation, possibly switching to record mode only if it detects certain voice patterns. Recorder unit includes a burst transmitter and scrambled radio (equivalent to a short-range communicator of

the same TL). Images and sounds can be stored and transmitted by burst on receipt of a coded radio command, or data can be sent via continuous transmission. \$500, 1/2 lb.

Implants

Implants are small devices surgically inserted into the user's body. **GURPS Ultra-Tech** and **Ultra-Tech 2** describe many bionic devices and implants, all of which are available in the **Alpha Centauri** setting. The implants described here are particularly important.

Neural Amplifier Implant (TL9(C)): A small implant placed along the spinal column, boosting the mind's natural ability to resist telepathic attack. The implant subtracts from any telepathic skill - friendly or hostile - used against the subject, exactly as if it were a telepathic Mind Shield. The implant's effective Power is 8 at TL9(C), +2 per TL above that. The implant uses an AA cell, which powers it for at least a century. Cost is \$5,000, plus an additional \$1,500 for the surgery.

The neural amplifier implant will not work unless there is a special field generator operating within one mile. The generator runs from building or vehicle power (10 kW). \$25,000, 100 lbs.

Neural amplifier technology is available only to members of the faction that develops it at TL9(C), entering general usage at TL10(C) at the earliest (see *Neural Amplifier*, p. 66).

Neural Interface Implant (TL10(C)): Lets the user send information to and receive information from a piece of equipment. Any equipment that can be controlled this way will be equipped with a neural interface module (p. 102) and fitted with a cable (about 1/16 of an inch in diameter and no more than a yard long) that is plugged into the user's skull socket. Connecting or disconnecting the cable takes two seconds. When connected, the user has direct mental control over the device. He can operate an interface-equipped computer without touching the keyboard, fire an interfaced gun without

pulling the trigger, drive an interfacéd vehicle with a thought, etc.

The recipient of the implant acquires the Interface Jack advantage (p. 87). The implant uses an AA cell, which powers it for at least a century. Cost is \$4,500, plus an additional \$1,500 for the surgery, which is performed at Surgery-3. This provides *one* socket (enabling control of one piece of equipment), but up to three extra sockets may be added, at \$1,000 each.

Medical Gear

Medical care is as described on p. B128, and is based on the *Build* tech level.

Automedic (TL9(B)): A robotic diagnosis and repair bed for one person. Its effective skill is 14 in First Aid and 13 in Diagnosis, Physician, and Surgery, +1 per TL above TL9(B). It is stocked with drugs and supplies, and has surgical waldoes that permit it to operate if needed. An automedic has no imagination; if it is confronted with a condition not in its database, it will put the patient into suspended animation and call for help. \$50,000, 600 lbs. Weight drops to 500 lbs. at TL10(B), and to 400 lbs. at TL11(B) or higher. A drug pack refill (usually required every 25 uses) is \$5,000, 50 lbs.

Clinical Immortality Treatment (TL13(B)): The patient is placed in an automedic or cryocell and subjected to nanoviruses which rebuild his body at the cellular level. When he emerges, he will have a HT score of at least 12, along with the Immunity to Disease, Regrowth, Unaging, and Very Rapid Healing advantages (the GM may require him to pay character points for these). The treatment takes 15 Planet days to complete, during which time the patient is unconscious. \$600,000.

Cryocell (TL9(B)): A "freeze tube" in which one person can be placed in suspended animation, storing him indefinitely without deterioration due to injury, disease, or age. As well, certain medical procedures involve time in a cryocell. \$55,000, 750 lbs.

Cryocells are TL9 equipment, but there were many aboard the *Unity*,

and some were brought to Planet's surface. These relics were extremely precious medical equipment in the years before new ones could be manufactured.

Emergency Medkit (TL8(P)): A belt pouch containing the basic requirements of TL8 first aid. Add +1 to First Aid skill until supplies are depleted. \$300, 1 lb.

Forced-Growth Tank (TL11(B)): An artificial womb in which a living organism can be brought to maturity very quickly. A human (or humanoid) embryo can be grown from a single cell to a baby that can survive outside the tank in 28 Planet days. If the infant is left in the tank, growth can be accelerated to an even more rapid pace, bringing the individual to adulthood in another 24 Planet days. The subject is unconscious throughout the forced-growth process. A person newly awakened from a forced-growth tank is a blank slate, with no memory or skills. A forced-growth tank runs on building or vehicle power (0.1 kW). \$1 million, 250 lbs.

Longevity Vaccine (TL10(B)): This treatment implants a permanent colony of symbiotic nanomachines within the subject. These benign molecular robots perform cellular repairs, dramatically slowing the aging process and accelerating healing. The symbiotes are delivered over the course of a six-hour hospital stay, after which there is a period of up to 10 Planet days during which the body adjusts to the machines' presence. Throughout the adjustment process, the patient may feel occasional chills or sweats. After that, he will feel better than he ever has before. The Longevity Vaccine boosts the user's HT score to 12, and grants him the Disease-Resistant, Longevity, and Rapid Healing advantages (the GM may require him to pay character points for these). \$150,000.

Medscanner (TL9(B)): A specialized scanner with a dedicated medical computer, designed to make specific diagnoses when used by a trained physician. Its effective range

is only one yard, doubled at each TL above TL9(B). On a successful Electronics Operation (Medical) roll, it adds +3 to Diagnosis skill, +1 per TL above TL9(B). \$900, 1 lb.

Micromed (TLU(B)): A small, portable automedic. When placed beneath the patient's head like a pillow, it extends sensors and waldoes to perform medical care. It has skill 13 in First Aid and 12 in Diagnosis, Physician, and Surgery, +1 per TL above TL11(B). \$20,000, 70 lbs. A drug pack refill (usually required every 5 uses) is \$1,000, 10 lbs.

Nerve Stapler (TLS(P)): A device originally designed for psychotherapy, but often applied on both Earth and Planet to deal with social dissension. When strapped to a patient's head and upper back, the nerve stapler extrudes hair-fine probes into his brain and spinal column. A psychotherapist can then use the device to inflict extreme sensations (not necessarily pain) on the patient, subjecting him to a rapid course of psychological conditioning. The patient must make a Will roll every hour that he is under the nerve stapler, or he will acquire the Nerve Stapled disadvantage (p. 89). A nerve stapler can also be used as a torture device when applying the Interrogation skill (p. B66). \$50,000, 20 lbs.

Punishment Sphere (TL9(C)): This device appears to be a transparent glass globe, 8 feet in diameter, resting atop a pedestal containing a power supply and electronic equipment. The subject is placed within the sphere, suspended in midair by restraints. The sphere includes an integral nerve stapler and stimulant electrodes, which are attached to the patient's body (at higher TLs, these items use nerve induction to work without touching the patient). The punishment sphere is used like a simple nerve stapler, but the Will roll to avoid the Nerve Stapled disadvantage must be made *every five minutes*. The spectacle of the patient's torment is often enough to force a Fright Check on anyone forced to witness it. \$100,000, 500 lbs.



Psionic Gear

Mind Shield (TL8(C)): An artificial shield against telepathic activity. The shield subtracts from any telepathic skill - friendly or hostile - used against the subject, exactly as if it were a telepathic Mind Shield. The shield's effective Power is 2 at **TL8(C)**, +2 per TL above that. The shield automatically warns the wearer, through a beeper or a silent signal on a HUD, when a telepath *fails* to penetrate it (but not if the telepath succeeds!). The shield may be built into a lightweight helmet (PD 0, DR 1): \$1,000, 2 lbs. Alternatively, the shield circuitry can be added to an existing helmet, adding \$1,000 to cost and 1 lb. to mass.

Psi Scanner (TL9(E)): This hand-held sensor will detect and localize any use of telepathy within 1,000 yards on a successful Electronics Operation (Sensors) roll. Within 100 yards, it can provide information about the source of psionic activity: human or alien, the skill being used, a rough estimate of the telepath's Power, etc. Operates for 2 months on a B cell. \$10,000, 2 lbs.

Telepathic Amplifier (TL9(E)): This device artificially augments the Telepathy Power of its user. It is rated for the maximum Power boost it can provide. The telepath can use up to half of this added Power at no penalty; he is at -2 to all telepathic skills per level of Power he uses beyond that.

A *personal amplifier* is worn on the head or built into a combat helmet. It can boost Power up to 4 levels, but penalties apply if Power is boosted more than 2 levels. Runs for 3 months on a C cell. \$25,000, 4 lbs.

A *backpack amplifier* can boost Power up to 6 levels, but penalties apply if Power is boosted more than 3 levels. Operates for 6 months on a D cell. \$40,000, 20 lbs.

An *amplifier throne* is a massive amplifier built into a throne-like chair, combined with biofeedback monitors and a medical computer. It can boost Power up to 8 levels, but penalties apply if Power is boosted more than 4 levels. Runs for 2 months on an E cell. \$200,000, 1,000 lbs.

Sensors

Bioscanner (TL9(D)): Scans for the complex organic molecules given off by living organisms. Plants and animals can be detected at ranges of up to about 500 yards, while a specific individual's genetic pattern can be detected at ranges of up to about 50 yards. \$1,000, 1 lb.

Chemscanner (TL9(D)): Scans for minerals, metals, and chemical compounds. For example, the chemical propellants within a single unfired round of TL7 ammunition can be detected at a range of about 500 yards. \$1,000, 1 lb.

Multiview Goggles (TL8(P)): These goggles darken automatically to cut glare and ultraviolet light. They can also amplify light, halving penalties for darkness except in complete darkness. Finally, they extend the user's vision into the infrared, displaying varying degrees of heat and letting him "see" even in complete darkness. Work for 3 months on an A cell. \$1,200, 1.5 lbs.

Radscanner (TL9(D)): Scans for energy, power, and radiation sources of all kinds. Can be used to detect power cells, especially those in use; for example, a D cell can be detected at a range of about 500 yards. \$1,000, 1 lb.

Seismic Sensor (TL8(P)): Detector sensitive to vibrations carried through the ground. Can be used to detect movements of vehicles or (at ranges of up to 100 yards) people. Can also be used to predict earthquakes or volcanic activity. \$1,000, 3 lbs.

Televiewers (TL8(P)): Electronic binoculars that provide up to 50x magnification. Include an electronic rangefinder accurate at distances of up to 5,000 yards. Work for 3 months on a B cell. \$950, 2 lbs.

Ultras scanner (TL12(D)): Takes X-ray-like holograms of the interior of any object, scanning one cubic yard per second at a range of 500 yards. Works for 5 minutes of continuous use on a C cell. \$8,000, 10 lbs.

Survival Gear

Air Mask (TL8(P)): Basic survival gear in the early days of settlement. The mask allows work on Planet's surface. It requires air tanks, but includes a rebreather to extend the endurance of those tanks. Also includes a built-in short-range communicator. Works for 12 hours on a B cell. \$300, 3 lbs.

Air Tanks (TL8(P)): Last 12 hours when used with the standard air mask (above). \$120, 12 lbs. Refills cost \$12.

Biosampler (TL9(E)): Biochemical analyzer that determines if a potential foodstuff is edible. Also detects harmful microbes, trace elements, or poisons. Internal computer has Biochemistry-14 for this purpose, or gives +2 to the user's own skill; add +1 to both per TL after TL9(E). \$500, 1 lb.

Envirobag (TE8(P)): Insulated and heated sleeping bag. Can be sealed and hooked up to air tanks, and folds to the size of a paperback book. \$125, 7 lbs.

Exploration Suit (TL10(E)): A bioplastic full-body suit. Can keep the wearer warm or cool, and can work with an air or respirator mask to filter out atmospheric pollutants, biological contamination, etc. With swim fins, it acts as an underwater suit. Can be manually set to one of several camouflage patterns (desert, arctic, forest, underwater, xenofungus, or night black), or to high-visibility orange. Provides PD 2, DR 15 to all hit locations. \$3,000, 8 lbs.

Filtration Canteen (TL8(P)): Holds and *purifies* a quart of water, removing all impurities and poisons likely to be encountered in Planet's surface water. At TL9(E), it also removes most common native microorganisms. Purification takes 30 minutes. The filter must be replaced every 100 quarts. \$175, 1 lb. (empty); 3 lbs. (full).

Inertial Compass (TL8(P)): Indicates the direction and distance traveled from any preset point on Planet's surface. Distances measured are accurate to within 1 yard in 1,000 miles. \$250, 1 lb.

Respirator Mask (TL9(E)): A mask with a miniature compressor. Allows the wearer to work *indefinitely* in Planet's atmosphere without air tanks. Includes a short-range communicator. Works for 1 month on a B cell. \$300, 3 lbs.

Second Skin (TL12(E)): Genetically engineered symbiont that covers the user's entire body. Filters the atmosphere and protects against ultraviolet light and environmental poisons, allowing the user to exist on Planet's surface indefinitely without other protective gear. Lasts 8 months per application. \$300.

Survival Module (TL10(E)): A bioplastic box about the size of a hardback book. When activated, it expands to form a comfortable, sealed, pressurized two-person cabin. Runs for 3 months on a C cell. \$600, 4 lbs.

Wet Suit (TL8(P)): A one-piece, ultralight underwater suit. Protects the wearer against cold (+5 to HT rolls) and incorporates ballast that permits him to remain at any depth he wishes. Includes a facemask that allows attachment of an artificial gill or air tanks. \$200, 5 lbs.

Tools

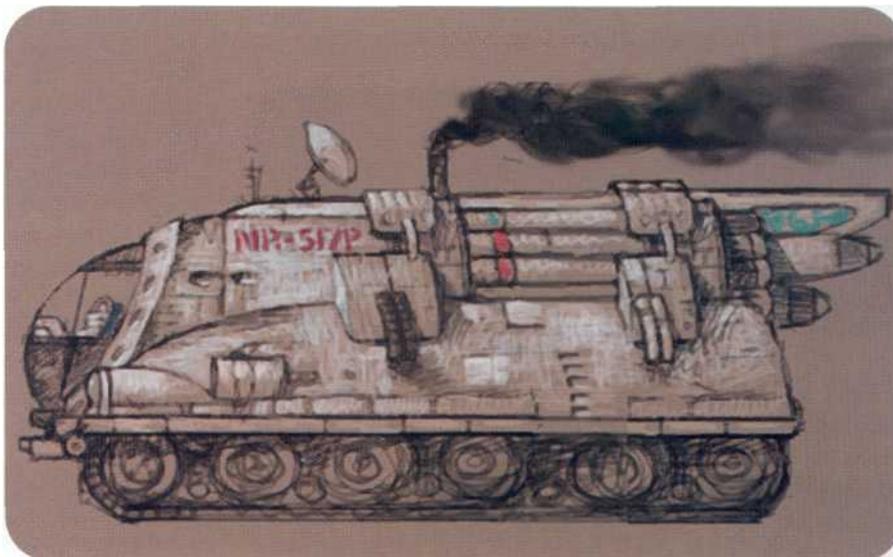
Biphase Rope (TL8(P)): A 3/8" diameter rope supports 1,000 lbs. of *weight*. Ten yards of rope are \$5, 1/2 lb. A 3/4" rope supports 4,000 lbs. Ten yards are \$30, 2 lbs. Strength doubles at TL10(B) and again at TL12(B).

Construction Foam Sprayer (TL9(B)): Projector for construction foam, a substance that expands on contact with air to form a light, tough, fireproof wall. One 14-lb. tank can fill 10 cubic yards. A one-foot thickness of foam can form a wall with DR 4, HT 30. Sprayer is \$100, 8 lbs.; foam tanks are \$40, 14 lbs. apiece.

Cybertek (TL9(B)): A semi-portable, automated repair shop. Its internal computer has skill 13 in Armoury, Engineer, and Mechanic, + 1 per TL after **TL9(B)**. If directed by a human technician, it is as good as a portable shop (see below), and gives an additional +2 to skill

because of its extensive technical database. \$30,000, 800 lbs.

Exoskeleton (TL8(P)): An open framework of bulky, artificial "muscles" and a strap-on power pack, commonly used for heavy physical labor on Planet. When the user moves, sensors in the suit match his movements. In effect, the wearer uses the suit's ST rather than his own.



The primary effect of the exoskeleton is to offset the effects of Planet's high gravity. The user ignores all ST penalties for high gravity and uses the suit's ST instead. He halves (round down) all DX penalties for high gravity. The suit is slightly clumsy, however. An ordinary DX roll is unaffected, but most DX-based skills are at -1. The GM may assess extra penalties for actions that would be particularly difficult (Acrobatics, for example). Most exoskeletons have removable gauntlets for fine work. An exoskeleton is usually fitted to its wearer, although a "generic" suit can be used at a further -1 penalty to DX and DX-based skills.

An exoskeleton will run for 1 week on a D cell. A typical exoskeleton costs \$35,000 for ST 15. Subtract \$4,000 if the suit is generic rather than fitted. Increase cost by \$10,000 per additional ST point, up to ST 20. Above ST 20, each ST point costs \$20,000. An exoskeleton masses 10 lbs. per point of ST, up to ST 20. Above ST 20, each ST point adds 20 lbs. of mass.

Flashlight (TL8(P)): Throws a 50-foot beam. A C cell will last for 6 months of continuous use. \$20, 1 lb.

Monowire (TL9(B)): A nearly invisible monomolecular thread. A strand can support up to 500 lbs. of *weight*. Monowire is difficult to handle safely, and can be strung to create deliberate traps (2d damage per strand to a moving victim; armor protects at 1/10

DR). A standard spool, with protective handles at both ends of the wire, is \$1,000, 1/2 lb.

Portable Shop (TL8(P)): A complete workshop. Gives +2 to Armoury, Electronics, Engineer, or Mechanic skill for all manner of repairs. An Armoury, Engineer, or Mechanic shop is \$4,000, 3,000 lbs. An Electronics shop is \$7,000, 1,500 lbs.

Tool Kit, Basic (TL8(P)): Standard tool kit for Armoury, Electronics, Engineer, or Mechanic skill. Allows work with no penalty to skill. An Engineer or Mechanic kit is \$800, 300 lbs. An Armoury or Electronics kit is \$1,200, 100 lbs.

Tool Kit, Miniaturized (TL8(P)): A belt-sized tool kit. Routine repairs can be made at only -2 to skill; major repairs are at -4. \$400, 2 lbs.

Tool Kit, Portable (TL8(P)): A compact version of the basic tool kit, fitting into a case or backpack. Minor repairs can be performed at no penalty, but major repairs are at -2 to skill. An Engineer or Mechanic kit is \$600, 20 lbs. An Armoury or Electronics kit is \$900, 10 lbs.

Vehicles

The *Alpha Centauri* computer game includes a *design workshop*, which allows players to build a bewildering variety of customized vehicles. Duplicating that feature in *GURPS* is well beyond the scope of this book; those who wish to explore the full range of possibilities should investigate *GURPS Vehicles* with the help of Appendix B. The following sample vehicles should hint at the vehicle types found in the computer game, with emphasis on the designs that were available in the early days of the settlement.



There are *many* vehicle types that did not specifically appear in the *Alpha Centauri* computer game, but which are perfectly appropriate for a roleplaying game set on Planet. Air transports, civilian aircraft, ground-to-orbit shuttles, lighter-than-air airships, passenger cars, rail and mag-lev trains, sailing ships, and spaceships are all appropriate. These can all be constructed using *Vehicles*.

The vehicle statistics given here assume *Earth* conditions. GMs desiring greater realism can apply rules from *Vehicles* to adjust for Planet's gravity, atmospheric pressure, and so forth (see for instance the sidebar on p. VE166). In the examples presented here, such adjustments would make no significant difference in vehicle performance.

Vehicular Weapons

Most of the vehicle-mounted weapons systems given here are extensions of technology already described for personal weapons (pp. 96-99).

Chaos cannons are low-powered Gauss weapons that fire shaped-charge HEAT rounds. The listed damage is for a direct hit; on a near miss, the round does explosive concussion damage (see p. B121 and p. VE190) like a normal high-explosive round. The light chaos cannon does 6dx6 and the heavy chaos cannon does 6dx10 concussion damage.

String disruptors are equivalent to *GURPS* disintegrators. Sealed armor and photon walls protect at 1/100 DR, while unsealed armor and probability sheaths do not protect at all. Armor PD is treated as 0 against string disruptors, as the beam cannot be deflected. The energy produced by the beam produces a secondary explosion. This blast does ordinary concussion damage equal to the damage listed for the weapon; armor DR protects normally.

No missiles, torpedoes, or launcher systems are given here. GMs running military campaigns at TL10 or higher may wish to use *GURPS Vehicles* to design such systems.

Sample Vehicles

Unity Rover (TL8)

The *Unity* carried dozens of vehicles intended for the initial exploration and development of Planet. Many of these reached Planet's surface in the landing pods, and were available to the colonists. Others were launched in supply pods, scattered across the surface for later salvage. The Unity Rover was the most common type, a multipurpose land vehicle suitable for far-ranging exploration of the surface. It was unarmed, but its crew and passengers often carried small arms, and a common refit was to mount some kind of support weapon on the vehicle.

Aside from the crew and passenger seats, the Unity Rover has seven bunks for increased comfort. A small galley is installed to allow the preparation of rations. There is plenty of empty "waste" space, and the crew and passenger stations are roomy, so conditions are fairly comfortable. The rover will support life for days or even weeks at a time without contact with a base.

Subassemblies: Body +5; Wheels (x6; off-road) +4.

Powertrain: 275-kW radiothermal generator; 200-kW wheeled drivetrain with all-wheel drive; 1,500-kWh energy bank. **Fuel:** Radiothermal generator provides power for 14

Mission Years. Energy bank can power drivetrain for 7.5 hours, and otherwise helps power all auxiliary systems.

Occupancy: 3 RCS, 4 RS (see above). **Cargo:** 330 cf

Armor	F	RL	B	T	U
All:	3/8	3/8	3/8	3/8	3/8

Equipment

Body: Very long-range radio with scrambler; PESA (3-mile range, forward arc); geophone (1-mile range); surveillance sound detector (level 5); precision navigation instruments; inertial navigation system; microframe computer (Complexity 4); computer terminals (x3); fire extinguisher system; mini-workshop (for Mechanic skill); winch (ST 150); two-man airlock; computerized controls with duplicate set; full life system (7 people); crashwebs (x7).

Statistics

Size: 20'long **Pay load:** 8,000 lbs. **Lwt.:** 34,912 lbs.

Volume: 2,280 cf **Maint.:** 25.6 hours **Price:** \$611,842

HT: 12 **HP:** 1,500 [Body], 200 [each Wheel]

gSpeed: 70 **gAccel:** 3 **gDecel:** 20 **gMR:** 1.5 **gSR:** 5
High GP. Off-road speed: 15.

wSpeed: 4 **wAccel:** 0.5 **wDecel:** 10 **wMR:** 0.5 **wSR:** 6
Draft: 2.2'.

Vehicular Weapons Table

LASER CANNON - GUNNER (BEAMS)

Weapon	Malf	Type	Damage	SS	Acc	1/2D	Max	RoF	Mass	Cost	MPS	CPS	Pow	TL
Light Laser	Ver.	Imp.	6dx10	25	25	24,000	72,000	1	600	\$40,000	-	-	28,800	8(C)
Heavy Laser	Ver.	Imp.	6dx20	30	27	48,000	144,000	1	2,400	\$130,000	-	-	115,200	8(C)
Light Gatling	Ver.(Crit.)	Imp.	6dx7	20	23	14,000	42,000	4	90	\$27,000	-	-	34,400	9(C)
Heavy Gatling	Ver.(Crit.)	Imp.	6dx14	25	25	29,000	87,000	4	710	\$91,000	-	-	136,000	9(C)
Light Fusion	Ver.(Crit.)	Imp.	6dx30(2)	25	25	23,000	69,000	1	1,100	\$43,000	-	-	209,000	11(D)
Heavy Fusion	Ver.(Crit.)	Imp.	6dx60(2)	30	27	46,000	138,000	1	4,400	\$150,000	-	-	836,000	11(D)
Light Quantum	Ver.	Imp.	6dx50(5)	25	27	45,000	135,000	1	360	\$224,000	-	-	1,080,000	13(B)
Heavy Quantum	Ver.	Imp.	6dx100(5)	30	28	99,000	297,000	1	1,700	\$760,000	-	-	5,184,000	13(B)
Light Singularity	Ver.	Imp.	6dx50(10)	25	27	45,000	135,000	1	480	\$140,000	-	-	1,800,000	13(C)
Heavy Singularity	Ver.	Imp.	6dx100(10)	25	28	90,000	270,000	1	1,900	\$420,000	-	-	7,200,000	13(C)

IMPACT CANNON - GUNNER (CANNON)

Weapon	Malf	Type	Damage	SS	Acc	1/2D	Max	RoF	Mass	Cost	MPS	CPS	Pow	TL
Light Impact	Ver.	Cr.	6dx5(3)	20	14	1,400	6,800	2~	43	\$9,700	0.3	\$8.8	0.058	8(C)
Heavy Impact	Ver.	Cr.	6dx10(3)	20	16	2,000	8,600	1	380	\$44,000	2.7	\$110	0.27	8(C)

GAUSS CANNON - GUNNER (RAILGUN)

Weapon	Malf	Type	Damage	SS	Acc	1/2D	Max	RoF	Mass	Cost	MPS	CPS	Pow	TL
Light Gauss	Ver.	Cr.	6dx12(2)	20	18	5,000	13,000	8	9,600	\$44,000	0.3	\$2.4	9,600	10(C)
Heavy Gauss	Ver.	Cr.	6dx25(2)	30	18	5,300	14,000	3~	14,100	\$120,000	4.7	\$38	14,100	10(C)
Light Chaos	Ver.	Exp.	6dx6(10)	25	18	4,800	13,000	1	1,875	\$70,000	1.5	\$55	1,875	10(C)
Heavy Chaos	Ver.	Exp.	6dx15(10)	25	18	5,200	14,000	1	3,375	\$92,000	2.7	\$98	3,375	10(C)

TACHYON CANNON - GUNNER (BEAMS)

Weapon	Malf	Type	Damage	SS	Acc	1/2D	Max	RoF	Mass	Cost	MPS	CPS	Pow	TL
Light Tachyon	Ver.	Imp.	6dx100	20	20	3,900	12,000	1	280	\$48,000	-	-	81,600	11(C)
Heavy Tachyon	Ver.	Imp.	6dx200	25	22	7,900	24,000	1	1,100	\$130,000	-	-	326,000	11(C)

SHARD CANNON - GUNNER (BEAMS)

Weapon	Malf	Type	Damage	SS	Acc	1/2D	Max	RoF	Mass	Cost	MPS	CPS	Pow	TL
Light Shard	Ver.	Spcl.	6dx120	20	20	8,600	26,000	1	270	\$280,000	-	-	292,000	11(D)
Heavy Shard	Ver.	Spcl.	6dx250	25	22	18,000	54,000	1	1,200	\$840,000	-	-	1,269,000	11(D)

GRAVITON CANNON - GUNNER (BEAMS)

Weapon	Malf	Type	Damage	SS	Acc	1/2D	Max	RoF	Mass	Cost	MPS	CPS	Pow	TL
Light Graviton	Ver.	Imp.	6dx6(100)	25	21	6,200	19,000	4	880	\$220,000	-	-	1,057,600	13(E)
Heavy Graviton	Ver.	Imp.	6dx12(100)	30	23	12,000	36,000	4	3,500	\$740,000	-	-	2,120,000	13(E)

STRING DISRUPTORS - GUNNER (BEAMS)

Weapon	Malf	Type	Damage	SS	Acc	1/2D	Max	RoF	Mass	Cost	MPS	CPS	Pow	TL
Light Disruptor	Ver.	Spcl.	6dx60(100)	25	28	-	70,000	1	1,300	\$750,000	-	-	2,500,000	13(C)
Heavy Disruptor	Ver.	Spcl.	6dx120(100)	30			10,000,000	29	-	140,000	1	5,000	\$2,600,000	-
														13(C)

Design Notes

The Unity Rover features a medium structure with standard materials. The body has heavy compartmentalization, and the wheel assembly includes all-wheel steering, improved brakes, improved suspension, puncture-resistant tires, and smartwheels. All subassemblies are sealed. Armor is standard metal. The rover has a remote-controlled hitch and pin mounted on it for towing other vehicles. Volumes/areas: Body 1,900 cf/1,000 sf; Wheels 380 cf/400 sf. The body includes 12.8 cf of waste space.

Unity Foil (TL8)

Many of the watercraft seen on Planet were hydrofoils, which exchanged deep-water capabilities for the ability to maneuver quickly in coastal waters. The Unity Foil was the first of these, an unarmed craft intended for waterborne

exploration and light cargo transport. No more than half a dozen were carried on board the *Unity*, and some of these never reached Planet's surface. Those few which *did* survive gave the factions that controlled them an early advantage in exploiting the bounty of Planet's oceans.

Aside from the crew stations, the Unity Foil has 20 bunks serving as off-duty quarters. Conditions on board are fairly cramped.

Subassemblies: Body +6; Superstructure [Sup] +5; Hydrofoils [Hyd] +4.

Powertrain: 2,700-kW radiothermal generator; two 1,200-kW hydrojets.

Fuel: Radiothermal generator provides power for all systems for 14 Mission Years.

Occupancy: 4 RCS (see above). **Cargo:** 160 (Bo), 2,800 (Sup)

Armor	F	RL	B	T	U
All:	3/8	3/8	3/8	3/8	3/8

Equipment

Body: Very long-range radios with scramblers (x2); PESA (5-mile range, forward arc); PESAs (x3; 3-mile range, left, right, and back arcs); AESA (10-mile range, no targeting, forward arc); active/passive sonar (20-mile range, no targeting); surveillance sound detector (level 8); precision navigation instruments; inertial navigation system; mainframe computer (Complexity 5); computer terminals (x4); full fire suppression system; complete mini-workshop; one-man airlocks (x2), computerized controls with duplicate set; full life system (20 people).

Statistics

Size: 33' long *Payload:* 63,200 lbs. *Lwt.:* 158,238 lbs.

Volume: 8,400 cf **Maint.:** 12 hours **Price:** \$2.7 million

HT: 12 *HP:* 6,000 [Body], 3,600 [Sup], 1,500 [Hyd]

wSpeed: 75 *wAccel:* 5 *wDecel:* 5 *wMR:* 0.25 **wSR:** 1
Draft: 4.0'.

Design Notes

The Unity Foil features a heavy structure with standard materials. The hull is hydrodynamic, with mediocre lines. The body has heavy compartmentalization, and has roll stabilizers for additional stability in the water. All sub-assemblies are sealed. Volumes/areas: Body 4,870 cf/2,000 sf; Superstructure 2,800 cf/1,200 sf; Hydrofoils 730 cf/500 sf. The body includes 113 cf of waste space. Armor is standard metal. Hydrojets and access space are in hydrofoils. hDrag is 585.

Unity Scout Chopper (TLS)

Rarest of all the scout vehicles carried on the *Unity* was the Scout Chopper, intended for fast air reconnaissance across Planet's surface. The few that survived the trip to the surface often remained grounded for lack of repair and maintenance facilities.

The Scout Chopper was unusual for "Unity" vehicles in that it did not provide long-term occupancy. The six passengers and crew were not intended to remain in the craft for more than a few hours at a time. The aircraft had no airlock, so those on board were normally required to wear their respirator masks throughout the flight.

Subassemblies: Body +5; Rotors (top-and-tail) +1; Skids (x3; retractable) +2.

Powertrain: 2,405-kW standard MHD turbine; TTR rotor drivetrain with 2,400 kW motive power; 300-kWh energy bank.

Fuel: 3,800-gallon self-sealing hydrogen fuel tank provides 7.9 hours full-power output from MHD turbine. Energy bank can power drivetrain for 7.5 minutes, and otherwise powers all incidental systems.

Occupancy: 2 NCS, 2 NS. **Cargo:** 30 cf

Armor	F	RL	B	T	U
All:	2/3	2/3	2/3	2/3	2/3

Equipment

Body: Very long-range radio with scrambler; radar (5-mile range, no targeting, forward arc); PESA (5-mile range, forward arc); precision navigation instruments; inertial navigation system; minicomputer (Complexity 3); computer terminals (x2); fire extinguisher system; computerized controls with duplicate set; limited life system (1.5 man-days for 4 people); crashwebs (x4).

Statistics

Size: 18' long *Payload:* 3,600 lbs. *Lwt:* 14,580 lbs.

Volume: 1,215 cf *Maint.:* 18.9 hours **Price:** \$1.1 million

HT: 12 *HP:* 600 [Body], 225 [Rotors], 25 [each Skid]

aSpeed: 290 **aAccel:** 5 **aDecel:** 15 **aMR:** 4 **aSR:** 5

Design Notes

The Unity Scout Chopper has a light structure with expensive materials. The body has good streamlining. The rotors fold down against the body for easy storage and transport. All subassemblies are sealed. Volumes/areas: Body 1,135 cf/800 sf; Rotors 23 cf/150 sf; Skids 57 cf/100 sf. The body includes 2.7 cf of waste space. Armor is expensive metal.

Terraformer Transport (TL8)

The earliest terraformer groups often spent long periods away from home. They needed mobile bases of operations, capable of supporting life and carrying heavy equipment across hundreds, even thousands of miles of Planet's wilderness. The solution was the Terraformer Transport, a massive crawler supporting 20 people and all their equipment. The first of these was built within a decade of Planetfall, and increasingly sophisticated versions continued in operation for centuries.

The crew stations are installed with bridge access space, giving the crew plenty of room to move around. Aside from the crew stations, the crawler has two cabins for command crew, along with 18 bunks. Conditions are much more cramped for most crewmembers than in a Unity Rover, but the Terraformer Transport will still support life for long periods. The vehicle bay is designed to carry heavy equipment (bulldozers, drilling rigs, etc.) and includes a number of power taps to allow the charging of auxiliary energy banks while in the bay. The payload statistics given here assume an average load of equipment in the vehicle bay.

Subassemblies: Body +7; Tracks (x4) +6.

Powertrain: 700-kW radiothermal generator; 300-kW tracked drivetrain.

Fuel: Radiothermal generator provides power for all systems for 14 Mission Years.

Occupancy: 3 RCS (see above). **Cargo:** 2,400 cf

Armor	F	RL	B	T	U
All:	3/8	3/8	3/8	3/8	3/8

Equipment

Body: Very long-range radios with scramblers (x2); PESA (5-mile range, forward arc); geophone (1-mile range); surveillance sound detector (level 5); precision navigation instruments; inertial navigation system; mainframe computer (Complexity 5); computer terminals (x3); full fire suppression system; complete workshop; science labs (x2; for Geology and Ecology skills); one-man airlock; two-man airlocks (x3); vehicle bay (4,800 cf of vehicles); computerized controls; full life system (20 people).

Statistics

Size: 35' long *Payload:* 124,000 lbs. *Lwt.:* 280,670 lbs.
Volume: 24,000 cf *Maint.:* 10.9 hours *Price:* \$3.3 million

HT: 9 *HP:* 6,000 [Body], 1,125 [each Track]

gSpeed: 18 *gAccel:* 1 *gDecel:* 20 *gMR:* 0.25 *gSR:* 6
Very Low GP. Off-road speed: 14.

Design Notes

The Terraformer Transport features a medium structure with standard materials. The body has heavy compartmentalization. The payload is figured assuming that 72,000 pounds of auxiliary vehicles are carried in the vehicle bay. The body is sealed, and has a remote-controlled hitch and a pin mounted on it for towing. Volumes/areas: Body 15,000 cf/4,000 sf; Tracks 9,000 cf/3,000 sf. The body includes 26 cf of waste space. Armor is standard metal.

Laser Foil (TLS)

As the factions began to compete with each other on land and at sea, they began to construct armed vehicles to project power against each other. The Laser Foil was a typical early design, intended for patrols along friendly coasts and sea transport routes. Some factions (notably the Nautilus Pirates) adapted it for raids against enemy installations.

One crew station is in each turret, the rest in the body. Aside from the crew stations, the Laser Foil has 20 bunks serving as off-duty quarters. Conditions on board are very cramped. The Laser Foil is a delicate machine and requires a great deal of maintenance during active operations; at least one full-time maintenance crewman is required.

Each laser cannon has full stabilization and a universal mount, reducing movement penalties to hit by 3 and increasing the vertical arc of fire to 90°.

Subassemblies: Body +6; Turrets [Tur] (x2) +3; Hydrofoils [Hyd] +4.

Powertrain: 3,500-kW radiothermal generator; 3,600-kWh energy bank; two 2,560-kWh energy banks (one in each turret); two 1,500-kW hydrojets.

Fuel: Radiothermal generator provides power for all systems for 14 Mission Years. Main energy bank provides power for hydrojets for 1.2 hours, and otherwise serves as a power reserve for all components. Secondary energy banks provide power for 80 shots from each turret when fully charged.

Occupancy: 8 RCS (and see above). *Cargo:* 100 cf

Armor	F	RL	BT	U	
<i>Body:</i>	4/200	4/400	4/200	4/100	4/100
<i>Turrets:</i>	4/400	4/100	4/100	4/100	
<i>Hydrofoils:</i>	4/100	4/100	4/100	4/100	4/100

Weaponry

Heavy laser cannon [Tur1:F] (limited by available power).

Heavy laser cannon [Tur2:F] (limited by available power).

Equipment

Body: Very long-range radios with scramblers (x2); PESA (5-mile range, forward arc); PESAs (x3; 3-mile range, left, right, and back arcs); AESA (20-mile range, no targeting, forward arc); active/passive sonar (20-mile range, no targeting); precision navigation instruments; inertial navigation system; IFF; advanced radar/laser detector; hardened mainframe computer (Complexity 5); computer terminals (x6); full fire suppression system; complete mini-workshop; one-man airlocks (x2); computerized controls with duplicate set; full life system (20 people). *Each Turret:* AESA (10-mile range, forward arc); computer terminal; HUDWAC with pupil scanner.

Statistics

Size: 33' long *Payload:* 6,000 lbs. *Lwt:* 194,494 lbs.
Volume: 6,194 cf *Maint.:* 7.8 hours *Price:* \$6.6 million

HT: 11 *HP:* 6,000 [Body], 525 [each Tur], 1,800 [Hyd]

wSpeed: 75 *wAccel:* 6 *wDecel:* 5 *wMR:* 0.5 *wSR:* 1
Draft: 4.2'.

Design Notes

The Laser Foil features a heavy structure with standard materials. The hull is hydrodynamic, with mediocre lines. The body has heavy compartmentalization, and has roll stabilizers for additional stability in the water. All sub-assemblies are sealed. Volumes/areas: Body 5,160 cf/2,000 sf; each Turret 130 cf/175 sf; Hydrofoils 774 cf/600 sf. The body has 24 cf of waste space; each turret has 0.3 cf of waste space. Armor is advanced metal. hDrag is 671.

Impact Rover (TL8)

This is a typical late-TL8 combat rover design, based on "impact" weapons technology. It vaguely resembles a 20th-century heavy armored car, with a few significant differences. First, the turret is relatively small, as both gunners work from fire-control stations in the body. Second, the rover is designed for long-term operations away from logistical support, with interior bunk space and a full life system. Finally, the rover has wheels instead of tracks, increasing reliability at the cost of off-road performance.

Aside from the crew stations, the Impact Rover has four bunks. It carries a 50mm cannon firing armor piercing, discarding sabot, depleted uranium (APDSU) rounds. It also mounts a coaxial impact support weapon, and sports a second such weapon in an open mount atop the turret. The ammunition bunkers in the turret are equipped with anti-blast features. The front and sides of the rover's body are sloped for superior armor protection. Armor on the wheels is in the form of a wheelguard, which protects against

damage from all directions but below on 1-4 on 1d. All weapons systems have full stabilization, reducing movement penalties by 3.

Subassemblies: Body +5; Turret (limited rotation, atop body) [Tur] +1; Open Mount (limited rotation, atop turret) [Opn] -2; Wheels (x4; off-road) [Whls] +4.

Powertrain: 525-kW radiothermal generator; 480-kW wheeled drivetrain with all-wheel drive; 600-kWh energy bank.

Fuel: Radiothermal generator provides power for 14 Mission Years. Energy bank can power drivetrain for 1.25 hours, and otherwise helps power weapons and all auxiliary systems.

Occupancy: 4 NCS (and see above). **Cargo:** 30 cf

Armor	F	RL	B	T	U
Body:	6/500	5/240	5/240	4/100	4/100
Tur:	6/500	5/240	5/240	4/100	
Opn:					
Whls:	4/100	4/100	4/100	4/100	

Weaponry

Heavy impact cannon [Tur:F] (55 50mm APDSU rounds).

Impact support weapon [Tur:F] (2,400 10mm AP rounds).

Impact support weapon [Opn:F] (2,400 10mm AP rounds).

Equipment

Body: Very long-range radio with scrambler; PESA (5-mile range, forward arc); geophone (5-mile range); precision navigation instruments; inertial navigation system; IFF; HUDWACs with pupil scanners (x2); advanced radar/laser detector; hardened minicomputer (Complexity 3); computer terminals (x4); full fire suppression system; two-man airlock; computerized controls; full life system (4 people). **Turret:** PESA (5-mile range, forward arc); laser rangefinder (5-mile range).

Statistics

Size: 19' long **Payload:** 1,560 lbs. **Lwt:** 61,340 lbs.
Volume: 2,500 cf **Maint:** 36 hours **Price:** \$1.2 million

HT: 10

HP: 1,500 [Body], 90 [Tur], 8 [Opn], 300 [each Whl]

gSpeed: 70 **gAccel:** 3 **gDecel:** 20 **gMR:** 1.5 **gSR:** 6
 High GP. Off-road speed: 20.

wSpeed: 5 **wAccel:** 0.3 **wDecel:** 10 **wMR:** 0.5 **wSR:** 6
 Draft: 2.7'.

Design Notes

The Impact Rover features a medium structure with standard materials. The body and turret each have 60° of slope on the front facing and 30° of slope on the left, right, and back facings (armor statistics above *include* the effects of slope). The body and turret have heavy compartmentalization, and the wheel assembly includes all-wheel steering, improved brakes, improved suspension, puncture-resistant tires, and smartwheels. All subassemblies are sealed. Volumes/areas: Body 2,061 cf/1,000 sf; Turret 25.5 cf/60

sf; Open Mount 0.5 cf/4 sf; Wheels 413 cf/400 sf. Waste space is allocated as follows: Body 23.874 cf, Turret 2.29 cf. Armor is expensive metal. hDrag is 1,555.

Infantry Support Track (TL9)

The Infantry Support Track (IST) was one of Planet's stranger military innovations. Infantry support weapons were crucial to success on the battlefield, since they were usually required to punch through the armor worn by battlesuit infantry. However, such weapons were unwieldy in the fluid, fast-moving skirmishes typical of colonial infantry warfare. The IST was one answer. It was essentially an armored scooter, large enough to accommodate a single infantryman in a half-standing position. Quick and agile, the IST could keep up with the front lines - but it also carried substantial armor to the front, protecting its crewman. A turret was mounted on the front of the vehicle, with a modular socket big enough for a support weapon and its ammunition. This made it easy to upgrade weapons systems as weapons technology improved. The IST (also called a "combat scooter" or "mobile pillbox") was a common sight for centuries on Planet's battlefields.

Subassemblies: Body +1; Turret (limited rotation, atop body) [Tur] -1; Tracks (x2) +1. **Powertrain:** 2-kW tracked drivetrain; 150-kWh energy

bank. **Fuel:** Energy bank can power drivetrain for 75 hours, and

otherwise powers all auxiliary systems. Energy bank is linked to modular socket to provide additional power to any weapon installed there.

Occupancy: 1 XNCS. **Cargo:** 2 cf

Armor	F	RL	B	T	U
Body:	4/65	4/30	3/40	3/20	4/20
Tur:	4/65	4/20	4/20	4/20	
Tracks:	4/20	4/20	4/20	4/20	4/20

Equipment

Body: Short-range radio with scrambler; PESA (2-mile range, forward arc); IFF; laser rangefinder; HUDWAC with pupil scanner; laser sensor; hardened small computer (Complexity 3); computer terminal; computerized controls; crashweb. **Turret:** modular socket (rated for 2 cf, 100 lbs.).

Statistics

Size: 4' long **Payload:** 340 lbs. **Lwt.:** 1,460 lbs.
Volume: 36 cf **Maint.:** 102 hours **Price:** \$38,480

HT: 12 **HP:** 75 [Body], 15 [Tur], 30 [each Track]

gSpeed: 20 **gAccel:** 1 **gDecel:** 20 **gMR:** 1 **gSR:** 4
 Very low GP. Off-road speed: 16.

Design Notes

The Infantry Support Track features a medium structure with standard materials. The track assembly includes improved suspension. Volumes/areas: Body 21.25 cf/50 sf; Turret 2 cf/10 sf; Tracks 12.75 cf/40 sf. The body carries 0.66 cf of waste space. Armor is standard metal.

7. Campaigns

Anyone can grasp details. It's the synthesist that is truly rare, the man who can step back and place a thousand unconnected details into their proper context. Such a man, even alone, could build a world.

*—Academician Prokhor Zakharov,
"Address to the Faculty"*

The *Alpha Centauri* setting is almost *too* rich for role-playing, covering centuries of time and a tremendous range of possible themes. This chapter is intended to help the GM

make sense of the setting and prepare interesting adventures for it.

Drawing the Map

The first step in planning a *GURPS Alpha Centauri* campaign is to draw a map of the playing field: that region of Planet where the action is most likely to take place. The following discussion assumes that the campaign will not cover *all* of Planet - although these guidelines extend naturally to such a world-spanning campaign. It also assumes that the GM does not have access to *Sid Meier's Alpha Centauri*. If he does, then see *Using the Scenario Editor*, and note that when translating from the computer game to an *Alpha Centauri* campaign, the guidelines in Appendix B may prove useful.

Planetography

Drawing a detailed topographical map is likely to be difficult, and is not really necessary for a viable campaign. Instead, block out the rough outlines of land and water. Next, place a few interesting geographical features - mountain ranges, rivers, areas of unusual fertility, etc. - and possibly some of the special landmarks described in Chapter 2. Finally, designate regions covered by xenofungal mats, up to about 25% of the map's area. Remember that the

xenofungus forms a continuous network extending all across Planet. Fungus areas should stretch out in long corridors across the play area, continuing off the edges and even going underwater as sea fungus.

Factions

The GM must decide which factions are present in the campaign and place the major players on his map. Factions fall into several broad categories.

Major Factions

A few factions will be exceptionally influential in the campaign. These "major factions" will exist as independent states, controlling bases in the play area. Unless the play area covers a fairly large portion of Planet's surface, it would be unusual to have more than 3 or 4 major factions in the campaign. On the other hand, there should be at least 2 or 3 major factions present.

Once you have chosen the major factions, place bases from each on your sketch map. Each faction will start with one base. These starting bases should be *thousands* of miles

apart. If a faction has plenty of available land to expand into, and does not lose any vendettas, then the number of bases it controls will double about every 35 Mission Years. A faction's bases should be several hundred miles apart and scattered more or less evenly (although they will cluster more closely in regions of significant resource value). Factions tend to expand until a natural border or another faction's territory stops them.

By around Mission Year 2250, each faction will control between 15 and 20 bases. After that, further expansion will usually involve long sea voyages or the conquest of other factions. Naturally, if the play area covers only a fraction of Planet's surface, then it may be that not all of a major faction's bases are on the map.

Minor Factions

"Minor factions" are those that remain independent, but whose territory is beyond the boundaries of the designated area of play. The activities of minor factions will be relevant, and citizens of those factions will appear in the campaign, but their influence is likely to be muted.

The GM should decide which minor factions are present. He should also decide how many factions, in total, there are in his version of the setting. In the computer game, there are always seven factions at the game's start - no more and no less. However, the GM is free to include a smaller or larger number of factions in a *GURPS Alpha Centauri* campaign.

Conquered Factions

Some factions may have been wiped out as independent societies by the time the campaign begins. This is especially

true for campaigns set later in Planet's history, after inter-factional vendetta has been raging for decades or centuries.

The GM should remember that the citizens of "eradicated" factions have not vanished. In the computer game, fully absorbing a conquered base into its new faction takes *decades*, and until this process is complete, the conquered base simmers with unrest and may break out in revolt. The interaction of the ideologies of conquered and conquering factions at close quarters provides a situation ripe for conflict and interesting adventures. Even after a base

has been completely absorbed, its citizens likely retain some of their desire for cultural and political independence. Note that a faction may be "eradicated" in one part of Planet but still thriving elsewhere. In the computer game, if a faction's last base is conquered before the rest of Planet has been fully explored, then its leaders can escape to establish new bases elsewhere. Thus, a faction may be both "eradicated" in the primary field of play and have "minor faction" status elsewhere. Such a faction is naturally hostile to the factions that conquered it.

Using the Scenario Editor

Sid Meier's Alpha Centauri includes a versatile tool for designing a *GURPS Alpha Centauri* campaign: the Scenario Editor. Depending on how much control the GM wants over his campaign setup (and how much work he is willing to do), there are two possible approaches here. Both of these start with the GM beginning a normal game of *Sid Meier's Alpha Centauri*. He should choose which seven factions will appear in play, and which faction to play personally at the start (this should probably be the faction that will be most central to the campaign). Other game parameters may be set to taste. In particular, the GM should choose whether to use one of the "canonical" maps of Planet or a randomly generated map.

The Simple Approach

At this stage, the GM may choose to play the game until a sufficiently interesting situation appears; for example, a major vendetta is underway, his faction is moving to complete a Secret Project, or research has begun to yield the technologies in which he is most interested. Then he should save the game and activate the Scenario Editor (type Control-K, or choose the top item under "Scenario" on the main menu bar).

When the Scenario Editor opens, the map switches to an "omniscient view." The GM can now see all of Planet, including all the facilities and units of every faction. He can even investigate the status of other factions' bases. As long as he makes no changes, he can absorb as much detail as he wishes and no game time will pass.

This approach is recommended if the GM is willing to forgo fine control of the Planet-wide situation, allowing the computer to generate many of the background details. In this case, the Scenario Editor is used primarily to *investigate* an existing situation.

The Complex Approach

Alternatively, the GM may choose to activate the Scenario Editor at once. In this case, he should switch to "Editor Only" mode (Control-Shift-F10, or choose the bottom item under "Edit Map" on the main menu bar). This will prevent game time from advancing or any units from moving while he

makes changes (a few moves may have been made by computer players before the GM's first turn).

At this point, the GM can make sweeping changes to the game situation. Since Planetfall has just occurred, there will be few bases and units, and no interaction between factions. This is the best time to redraw the map of Planet. The existing map can be adjusted using the tools on the "Edit Map" menu, or redrawn from scratch using the same random-generation tools that generate the usual game maps.

This is also the best time to move factions around, placing the ones the GM finds most interesting in the same region of Planet. The GM cannot simply create bases out of thin air, but he can "cheat" as follows. First, use the "Clear Bases and Units" option from the "Edit Map" menu to destroy all existing faction units. Then place units for each faction (including at least one Colony Pod and one Scout Patrol) in the area where that faction is to take root. After placing all factions, exit "Editor Only" mode and deactivate the Scenario Editor. As each faction's turn comes around, one of its first moves will be to build a base at or near the location of the Colony Pod.

The GM may move the game forward from this point, using a combination of the Scenario Editor and play against the computer to guide the situation. Whenever he wishes to make changes, he can return to "Editor Only" mode to prevent the computer from advancing the clock. Frequent game saves are *strongly* recommended.

A variant of this approach involves starting the game in "hotseat" mode. Set up a multiplayer game and select the "Hotseat/Play-by-Email" option. When it comes time to choose factions, you will be asked whether you wish to include another human player after each faction is selected. By repeating this process, you can designate up to seven factions to be run by a player. Once the game begins, you will be able to play all seven factions yourself, controlling *every* aspect of Planet's history. As before, when you arrive at an interesting situation, you can stop and use the Scenario Editor to examine any necessary details.

Another way in which a faction can be conquered and yet retain independent existence is for it to swear a perpetual Pact of Brotherhood (p. 60) with its conqueror. This allows the conquered faction to retain independent control over a few bases, at the price of being a vassal for the rest of Planet's history. Such situations will give rise to their own tensions and conflicts.

Nonexistent Factions

The GM should also decide which factions never took root in his version of the setting. Perhaps the individuals who would otherwise have led those factions still exist, but never felt destiny's mantle descend on them.

Of course, freed from the limits of the computer game, there is no reason why *all 14* factions can't take part: the original seven human factions, the five human factions that won independent existence after Planetfall, and the two alien factions. Such a game would be chaotic and confusing, but it would also present greater opportunity for interesting adventures.

New Factions

There's no reason why the GM shouldn't invent wholly new factions

for his own version of the setting. Indeed, the *Sid Meier's Alien Crossfire* expansion pack includes a

"faction editor" which permits players to do just that.

One thing to bear in mind is that all of the existing factions are built around strong archetypes: the Scientist, the Religious Zealot, the Radical Revolutionary, etc. New factions should be based on equally strong ideals and have equally larger-than-life leaders. They should also have natural friends and foes among the existing factions, to provide possible conflict.

An interesting vehicle for the introduction of new factions is the *eighth landing pod*. In some versions of the canonical backstory, the *Unity* had eight cryobays and eight landing pods, but one of each was destroyed by the micrometeor impact that nearly wrecked the mission. Suppose the meteor had missed the eighth cryobay while still damaging the starship's fusion drive? This "alternate history" of Planet would provide an easy hook for the GM to introduce an eighth faction of his own design.

Faction Alternatives

There are several ways to approach the use of factions:

The Central Faction Game. One faction is chosen to be the center of action in the campaign. The GM develops this faction's society and history in greater detail, and most characters (PCs and NPCs alike) are from this faction. Adventures revolve around the central faction's activities, and may include conflicts internal to the faction. Other factions appear mainly as allies or adversaries.

The Multiple Factions Game. Two or three factions are chosen to share the limelight. The PC group may be composed of citizens from different factions, in which case the GM will have to decide how such a diverse group holds together! Perhaps the most important factions are allies, and there is a great deal of cooperation between them at the personal level. Perhaps the factions are usually unfriendly, but must cooperate to face a greater threat. Or perhaps the adventurers have turned their back on factional divisions and are charting an independent path.

The Mingled Factions Game. Instead of factions forming territorial states, they represent distinctive groups within the population of a unified Planetary society. Inter-factional disputes play out on a personal rather than a national level. Characters may be from any faction, and adventures may involve interaction with many or *all* of the factions. This approach diverges significantly from the *Alpha Centauri* computer game.

A similar situation might occur late in Planet's history if one major faction manages to unify Planet under its own leadership. In that case, all the other factions would still exist as minority populations subject to the victorious factional government. Such a campaign might involve a great deal of covert activity and political intrigue, especially if the "conquered" factions hope to seize control of the 1 eventual ascent to Transcendence.

Leader Longevity

The GM must decide whether the factions are led by the faction leaders presented in the computer game (and in Chapter 3).

The computer game suggests that the seven (or more) faction leaders prolonged their lifespan for decades through the judicious use of what cryocells remained after Planetfall. The techniques involved were too expensive, or put too much wear on the equipment, to be made available to all. Eventually, medical science advanced to the point where *everyone* could enjoy life extension, and where the leaders could survive until the end of their struggle for power. Thus, each faction served throughout its entire existence as the extension of its founder's ideological views.

However, it might be interesting to consider a situation in which the "canonical" faction leaders age and die normally sometime after Planetfall, to be succeeded by their children or by senior members of the faction council. Each faction would be subject to succession struggles, changes in ideology with new leadership, etc. Such a situation would be more chaotic, but would give the GM greater leeway to exercise his creativity - especially by providing more plot hooks.

GMs should also consider that most of the faction leaders from the computer game are not absolute dictators. Many lend themselves to portrayal as prophets or visionaries, using moral authority to keep people focused on faction ideology. At any given time, they may not even hold any formal office within the faction hierarchy. In such a situation, the day-to-day management of the faction will be left in the hands of other people - possibly including the PCs.

Running the Game

Once the GM has drawn the map and chosen the factions for his campaign, he needs to fill in some details.

Starting Year

The most critical decision is to set the Mission Year in which the campaign will begin. This date, in conjunction with Chapter 4, will suggest the campaign's base TL. In turn, the TL and the *Setting Faction Technology* rules (p. 56) will help determine which technologies are widely available (and which are still under development).

A close reading of Chapter 4 will reveal the technical and social trends leading up to the campaign timeframe. In particular, it will suggest which Secret Projects have been built and which may be in the process of construction when the campaign begins. The GM should decide which faction owns each of the Secret Projects.

Campaign Type

The GM should decide on the general focus of the campaign. The *Alpha Centauri* setting supports almost every genre, but a few campaign types merit special consideration.

The Military Campaign

Members of military units will rarely be idle. Even when the faction is not at vendetta, soldiers must patrol faction territory, deal with hostile native life, and support base security teams as needed. In between assignments, soldiers have their own business to attend to, and this will often involve adventures as well.

The Probe Team Campaign

For players who prefer the excitement of undercover work and espionage, assembling a probe team is an attractive option. Each assignment will involve penetrating hostile territory to perform "impossible missions."

Propaganda, sabotage, and subversion are all in a day's work. Then there are the counterintelligence assignments: working with base security forces to solve crimes and ferret out enemy agents.

The Secret Project Campaign

Each Secret Project will suggest adventures. During its construction, such a project will be the target of espionage activity, as other factions try to steal technology or sabotage the project. It will also be the focus for large-scale internal conflict, as the building faction's society tries to reorganize itself. Even after the project is complete, adventures may revolve around its activities.

For example, the Merchant Exchange involves many traders visiting factions all over Planet to transfer goods and close deals. The Empath Guild implies a community of telepaths, developing their powers and supporting their faction through diplomatic, espionage, and military activities. The Cloudbase Academy suggests a military campaign in which the adventurers are pilots who must deal with personal difficulties in between sorties against the enemy.

Adventure Seeds

At this point, the GM should have a workable background for his campaign. Now he must determine which plot threads the adventurers will have to deal with. Below are a few ideas for *GURPS Alpha Centauri* adventures.

Planetfall Adventure Seeds {TLS}

How Red Was My Valley? The adventurers are assigned to survey and map a large valley many hundreds of miles from the nearest faction base. They have only what they can carry in a single rover, and will not be able to call for quick help. The valley has the usual



local flora and fauna, along with some ecological mysteries to unravel. Then the rover from the *other* faction makes an appearance . . .

Which Faction Are We, Anyway? Immediately after Planetfall, the seven colonist groups had not yet hardened into their eventual ideological positions. Each faction experienced considerable uncertainty over goals and policy. In this scenario, the PCs are all members of a colonist group that includes *two or more* of the faction leaders from the computer game, along with a few strong NPCs who might also make good leaders. The adventurers must contribute to the survival of the group, but they will also be taking part in the debates (and possibly the internal violence) that will decide who is in charge for the foreseeable future.

Empire-Building Adventure Seeds (TL9-10)

Get Out The Vote. The Planetary Council will meet later this Mission Year, and it's critical that the PCs' faction leader be elected Governor. Unfortunately, there aren't enough votes . . . *unless* a certain base belonging to a rival faction can be "convinced" to switch sides. Pack up the intrusion software and telepathic amplifiers - it's time to form a political action committee, Planet style.

Vendetta. For whatever reason, the adventurers are taking this faction war *seriously*. They aren't just out to fight another faction, they know exactly which individual leader on the other side has angered them, and they are out for revenge. Naturally, the enemy isn't interested in cooperating.

War Story. The order has come down: a specific soldier is to be relieved of duty so that he can return home and take care of his invalid

parents. Unfortunately, the faction is at vendetta, and the soldier was last seen entering a zone of particularly intense fighting. Can the PCs find him and return him to safety?

Transhuman Adventure Seeds (TL11+)

Derelict. While performing a mining survey deep in space, the adventurers come across a spaceship, apparently long deserted. Oddly enough, it appears to be of *human* design - yet it has been in the Alpha Centauri system for centuries. Who built it, how did it get here, and what secrets might be hidden on board?

Ghost In The Machine. There is an uncanny presence in the VR networks, appearing to citizens at random intervals and frightening them with disturbing images and sounds. The PCs are sent to investigate. Is it a rogue AI on the loose? An unbalanced telepath preying on VR users? An avatar of the Planetmind trying to understand the VR environment? Or something stranger yet?

Crossovers

GURPS Alpha Centauri was designed to be self-contained as much as possible, so that fans of the computer game would not need to invest in a lot of other *GURPS* material to enjoy adventures on Planet. However, several *GURPS* sourcebooks would broaden any *Alpha Centauri* campaign.

GURPS Bio-Tech

This supplement provides detailed rules for TL7+ genetic engineering and biotechnology. Most of the technologies described in *Bio-Tech* would work "as is" in an *Alpha Centauri* campaign, where mastery of the biological sciences is an important aspect of colonial civilization. The rules for genetic engineering to produce new racial subtypes are particularly appropriate for mid-to late-period campaigns.

GURPS Cyberpunk

The cyberpunk sensibility is dark and alienated, with cynical protagonists fighting against the oppression of large, impersonal institutions. There is plenty of room for that kind of flavor in the *Alpha Centauri* setting. It would be easy to adapt the detailed "netrunning" rules in *Cyberpunk* to the situation on Planet.

GURPS Psionics

Alpha Centauri assumes that only Telepathy manifests itself among Planet's colonists, and adapts some of the rules from *Psionics* to handle advanced telepathic techniques. However, the GM may wish to include other psionic powers, whether from *Basic Set* or from *Psionics*.

The Electrokinesis, ESP, Healing, and Psychic Vampirism powers would be most appropriate, but *all* of the psi abilities might play a role in a more cinematic campaign. The GM should be careful to match access to psi powers to the pace of technology. One of the fundamental themes of *Alpha*

Return to Earth?

Sid Meier's Alpha Centauri makes it clear that the Chiron colonists lost all contact with Earth even before reaching Alpha Centauri. It also suggests that after Transcendence, the Planetmind sent a large expedition manned by humans to colonize Earth once again.

GMs who wish to use some of the ideas from *Alpha Centauri* against the familiar backdrop of Earth may wish to set a campaign after the return of the Chiron colonists. What this return expedition might find is up to the GM. Perhaps humanity has become extinct on its homeworld. Perhaps survivors on Earth or in the space colonies are busy rebuilding a new civilization of their own when the Planetmind's emissaries return. Or perhaps the Progenitors have stumbled across Earth, and the expedition has to organize resistance against an alien invasion.

Centauri is that powers of the mind are only discovered and released by way of careful scientific study and development.

GURPS Space

This book includes extensive rules for spaceships, space travel, and space combat, and for a variety of alien environments. It would likely prove useful in campaigns set later in Planet's history, as faction struggles spread off Planet and into the rest of the Alpha Centauri system.

Alternatively, a campaign involving the Progenitors might jump off Planet and out into the galactic empire dominated by the aliens. The colonists might even discover methods of interstellar travel themselves, and explore the galaxy for humanity or on behalf of a Transcendent Planetmind.

GURPS Vehicles

Vehicles includes complete rules for the design and use of all types of vehicles and weapons systems. It would let the *Alpha Centauri* GM enrich his campaign with the full range of units from the computer game (and more besides!), including antigravity ships, artillery, helicopters, hovertanks, hydrofoils, jets, missiles, powered battle armor, seagoing cruisers, spaceships, and submarines.

Transhuman Space

The *Alpha Centauri* setting shares many thematic elements with *Transhuman Space*: the expansion of humanity's diversity, the clash of great ideologies, the rush of new technology, etc. Placing the two settings in the same overall universe would not be much of a stretch, provided the backstory of the *Unity* expedition were changed to fit. However, the fact that *Alpha Centauri* is "space opera" while *Transhuman Space* is "hard biopunk" would necessitate some adjustment in genre flavor.

Appendix A: GURPS Technology in Alpha Centauri

GURPS Alpha Centauri modifies the standard *GURPS* technology progression. Those with access to supplements such as *Ultra-Tech* and *Vehicles* can use the guidelines below to determine when technologies from those books should appear in the *Alpha Centauri* setting.

Structural Materials and Armor

Structural materials and armor follow the usual *GURPS* rules. The standard material at TL8(B) is *synthmetal Plasma steel* materials become available at TL8(C). *Silksteel* materials first appear at TL9(B), and continue to improve through TL11.

At TL12(C), it becomes possible to use various forms of hyperdense matter with prodigious tensile strengths. These are often called *neutronium* materials, although this term is incorrect - no one is actually carrying around bits of neutron-star matter. Materials at TL13(B) and up include various forms of "exotic matter" (e.g., pseudo-matter with volume and resistance, but no mass). The most common armor type at this TL is called *antimatter plate*, but again, this is a slang term and not technically correct!

Propulsion Systems

Most vehicle propulsion systems appear at the standard *GURPS* TLs, but *reactionless thrusters* appear two TLs late, at TL11(D), and *contra-grav generators* appear one TL late, at TL13(E).

Only slower-than-light spaceship drives are available before TL13. Note that the *Unity* used several types of "Superscience" STL drive technology; therefore, even the more unrealistic fusion and antimatter rockets in *GURPS Space* may be available, and may even appear *early*, if the GM wishes.

Stardrives appear three TL late, at TL13(E). *Sid Meier's Alpha Centauri* is vague on the Progenitor FTL drive. It appears to be some form of jump drive with vast energy requirements, but the GM may use any FTL drive he wishes.

Weapons Systems

Weapons appearing in other *GURPS* material are available as follows.

Standard Weapons Projectile Weapons

Conventional and Electromag: Use the normal rules. The "shredder" side arms available at TL8(P) are low-powered electromag weapons. Conventional slugthrowers have a renaissance at late TL8 and TL9, and are called *impact* weapons. Later electromag weapons include the *chaos* guns appearing at TL10(C).

Gravitic: Unavailable. The main gravitic weapon is the *graviton gun* (see below).

Beam Weapons

Disintegrators: Unavailable. The most similar weapons which does appear is the *string disruptor* (see below).

Disruptors: Unavailable.

Flamers: Appear at TL8(C). They are called *flame guns*, and are the primary defense against native life forms.

Fusion Beams: Appear at TL11 (D). They are called *plasma shard* weapons.

Gravity Beams: Unavailable. The main gravitic weapon is the *graviton gun*.

Lasers: Use the normal rules. X-ray lasers are called *fusion lasers*, and gamma-ray lasers are called *quantum lasers*.

Particle Beams (Blasters): Not often used. The particle-beam cannon available at TL11(C) are called *tachyon weapons*.

Stunners: Use the normal rules. These rarely see military use, but are often employed by police units trained in "non-lethal methods."

New Weapons

Several weapons systems in *Alpha Centauri* don't match standard *GURPS* technology. Below are guidelines for using *GURPS Vehicles* to design new weapons of these types. *Damage* and *Half Damage Range* refer to the rules on p. VE125, *Maximum Range* and *Weight* to those on p. VE126, and *Power Requirement* and *Cost* to those on p. VE127.

Quantum Lasers (TL13(B)): Similar to standard *GURPS* gamma-ray lasers, but much more compact. All normal laser rules

apply, including the laser autofire rule. *Damage Type*: Impaling. *Damage*: The value of B is 0.5. The armor divisor is (5). *Half Damage Range*: The value of B is 75. *Maximum Range*: Three times 1/2D range if damage is 20d or more, otherwise twice 1/2D range. *Weight*: The value of B is 1,000. *Power Requirement*: The value of E is 3. *Cost*: The base cost is multiplied by 4.

Graviton Guns (TL13(E)): These are often thought of as projectile weapons, but the "projectile" is a hypercoherent packet of gravitic energy a few millimeters across. Graviton guns are built as beam weapons. *Damage Type*: Impaling. *Damage*: The value of B is 0.14. The armor divisor is (100). *Half Damage Range*: The value of B is 24. *Maximum Range*: Three times 1/2D range if damage is 3d or more, otherwise twice 1/2D range. *Weight*: The value of B is 150. *Power Requirement*: The value of E is 2. *Cost*: The base cost is multiplied by 2.

Singularity Lasers (TL13(C)): The final evolution of laser technology. They match no standard *GURPS* weapons, but all normal laser rules apply. *Damage Type*: Impaling. *Damage*: The value of B is 0.5. The armor divisor is (10). *Half Damage Range*: The value of B is 75. *Maximum Range*: Three times 1/2D range if damage is 20d or more, otherwise twice 1/2D range. *Weight*: The value of B is 750. *Power Requirement*: The value of E is 5. *Cost*: The base cost is multiplied by 2.

String Disruptors (TL13(C)): This ultimate weapon is similar to a compact disintegrator in *GURPS* terms. *Damage Type*: Special. *Damage*: The value of B is 0.36. The armor divisor is (100). *Half Damage Range*: Not applicable. *Maximum Range*: Computed as for a disintegrator. The value of B is 70. *Weight*: The value of B is 800. *Power Requirement*: The value of E is 2.5. *Cost*: The base cost is multiplied by 5.

Electronics

Most electronic devices appear at the usual TL, except those that use gravitic or FTL technology.

Communications

Radio and *laser* communicators work normally. *Gravity-ripple* communicators appear at TL13(E). *FTL* communicators appear at TL13(D); multiply mass, volume, energy requirement, and cost by 10.

Computers

Computer hardware follows the standard *GURPS* progression. Neural-net computers are said to use *polymorphic software*. Full sentence does not appear until computers reach Complexity 8, but computers may be *pre-sentient* at Complexity 6 (see p. 101).

Computer software works as described in other *GURPS* material, but the cost is determined differently (see p. 105).

Sensors

Most sensors appear at the usual TL. *Bioscanners*, *chemscanners*, *radscanners*, and *multiscanners* work as described in *GURPS Ultra-Tech* (in this setting, their unrealistic range comes from the application of Progenitor "resonance" technology). *FTL sensors* appear at TL13(D).

Power Systems

Power systems appear on a slightly different schedule, and some operate on a different physical basis than that given in other *GURPS* supplements.

Power Plants

Fission Reactors, *Radiothermal Generators*, and *Nuclear Power Units*: Appear on the usual TL schedule.

Fusion Reactors: Sid Meier's Alpha Centauri implies that fusion power appears at TL10(D), or one TL late. *GURPS Alpha Centauri* assumes that it appears at TL9, as usual, but that the reactors are too large and expensive to be used in portable applications such as vehicle engines, and so are primarily used to supplement base- or faction-wide power grids. Small, portable fusion plants do not appear until TL10(D), and are what the "Fusion Power" technology in the computer game actually represents.

Antimatter Reactors: Appear one TL late, at TL12(D). Antimatter power is called *quantum power* in this setting.

Total Conversion Power: Appears one TL early, at TL13(D), and in this setting is called *singularity power*.

Fuels

Natural fossil fuels are vanishingly rare on Planet. At TL8(P), aviation gas, diesel fuel, gasoline, jet fuel, propane, and liquefied natural gas all cost *100 times* the price given on p. VE90. At TL9(E), processes become available for relatively cheap synthesis of these fuels, and the price falls to only *5 times* the base cost. All other fuels have normal prices.

Most vehicles on Planet either use some form of nuclear power or rely on energy banks. Vehicles that use combustible fuels typically burn either hydrogen or alcohol. For more details, see pp. VE88-90.

Other Technologies

Almost everything else from other *GURPS* technology books appears at the usual TL, with the usual mass and cost. Some especially appropriate items appear in Chapter 6, but others may be introduced at the GM's discretion.

Force Fields

Deflector fields appear at the usual TL11(B). In this setting, a deflector field is called a *probability sheath*.

Force screens appear at TL11(B). Personal force screens appear at the same time as vehicle-rated ones, meaning they appear two TLs early. Force screens are called *photon walls*. They are *rigid* and cannot be overloaded, functioning as "switchable" armor protecting the user (p. 100).

Gravitic Technologies

All gravitic devices are delayed from the usual TL. *Tractor beams* appear at TL12(E). *Pressor* and *combination beams* appear at TL13(E). *Artificial gravity* technology appears at TL12(E). *Gravity web* safety devices appear at TL13(E).

Appendix B: Converting Sid Meier's Alpha Centauri to GURPS

Below are a number of suggestions for converting elements of the *Alpha Centauri* computer game to *GURPS* game mechanics.

Map Conventions

The following guidelines apply when building a campaign map on the basis of an *Alpha Centauri* game situation.

Map Type

It is recommended that you start any session of *Sid Meier's Alpha Centauri* intended as the basis for a *GURPS* campaign with either "The Map of Planet" or a random world of "Standard" size.

Map Scale

Each tile on the map of Planet represents a diamond-shaped area of Planet's surface. Tiles measure roughly 310 miles

north-south, no matter where they are located on Planet. The east-west length varies with latitude: near the equator, tiles are up to 740 miles across, while at the north or south map edges (assumed to be at 75°N or 75°S latitude), tiles are about 370 miles across.

The distance from the center of one tile to the center of an adjacent tile (across a *side* rather than a vertex) is roughly 400 miles at the equator, falling to about 240 miles near the north or south map edges.

Each unit on the map can be interpreted in terms of troops and vehicles defined using *GURPS* rules.

Military Units

Defense Value

The base Defense Value (DV) of a unit determines the approximate DR of its constituent battlesuits or vehicles.

The DR on this table is the approximate torso DR of a normal infantryman's armor or battlesuit. At DV 6 and up, it probably includes the DR of a personal photon wall (p. 100) layered over the armor; a probability sheath (p. 100) is also likely.

Bases

The population of a base is loosely tied to the base's Size level, per the table below. Population is assumed to grow at about 60% from one Size level to the next until Size 21, after which the growth rate is reduced to only 10%.

Base Size Table

Base Size	Population	Base Size	Population	Base Size	Population
1	1,000	11	100,000	21	10 million
2	1,600	12	160,000	22	11 million
3	2,500	13	250,000	23	12 million
4	4,000	14	400,000	24	13 million
5	6,300	15	630,000	25	14 million
6	10,000	16	1 million	26	15 million
7	16,000	17	1.6 million	27	16.5 million
8	25,000	18	2.5 million	28	18 million
9	40,000	19	4.0 million	29	20 million
10	63,000	20	6.3 million	Each +8	x2 population

About 90% of a base's population will actually reside in or close to the central settlement, located in the area indicated by the base's map tile on the campaign map. The other 10% will be in small, fortified settlements, located within about 750 miles of the main base, near mines, solar power or windmill farms, agricultural areas, military strong points, road junctions, rivers, etc. They provide most of the manpower base for resource extraction, and also man small support bases for long-range transport and military activities.

Armored vehicles will have thicker, laser weapons, armor penetration assumes that three stronger armor than infantry. A lightly out of four shots per burst hit, and that damage armored vehicle will have about 5 times the accumulates per the laser aut-ofire rules on p. B120. infantry DR given above. Heavy combat For example, "impact" weapons are AV 4 in *Alpha* rovers and hover tanks will have about 10 *Centauri*. The matching DV of 4 implies that an times an infantryman's DR. The front facing infantryman's armor would be about DR 65. If we of a ground vehicle will usually have about divide 65 by the average roll of 3.5 on 1d, we get twice this amount of DR, as will the side 18.6, which implies that the impact support facings of most sea vehicles. Faces not weapon should do 18d or 19d of damage. Armor-piercing ammunition gives an usually subject to attack (usually the top and underside) will have considerably lower armor divisor of 2, so with DR. Combat vehicles often use sloped armor to increase DR while reducing weight. As with infantrymen, at DV 6 or higher, a vehicle is likely to have a photon wall or probability sheath installed.

Combat vehicles on Planet are not always designed so as to be able to survive a hit from their own main guns. Many vehicles are "heavily armed eggshells," designed to press the attack and use mobility to avoid facing equivalent opponents.

Attack Value

The weapons systems in *GURPS Alpha Centauri* are designed so that the infantry support weapon associated with a technology with a given Attack Value (AV) will penetrate the DR associated with a Defense Value (DV) equal to that AV at least half the time on a hit. For projectile weapons, the effects of armor-defeating ammunition are taken into account, where applicable. For

Defense

Value Table

DV	DR
1	30 or less
2	40
3	50
4	65
5	80
6	100
8	165
10	250
12	400
13	500
16	1,000
20	2,500
24	6,500
30	

All other weapons for a given technology can be designed by comparison to the infantry support weapon. An infantryman's rifle should do roughly half the damage of the infantry support weapon; pistols and carbines should do between one-quarter and one-third this damage. The "light" and "heavy" cannon for each weapon type should do about 5 times and 10 times this damage, respectively. An infantry support weapon should not mass more than about 60 lbs. loaded, while a rifle should not mass more than about 12 lbs., plus the mass of any power cells. All of these computations are approximate; GMs with access to *GURPS Vehicles* are welcome to adjust the weapons to taste. In the computer game, some infantry units are designed to *garrison* fixed positions. These units are poor on the offensive

(low AV), but their high DV lets them easily destroy enemy forces that attack them. When converting such units to *GURPS*, it is reasonable to base the power of their weapons on their DV instead of their AV. However, much of the combat effectiveness of such "garrison" or "sentinel" units will be tied up in emplaced heavy weapons and fortifications. As a result, these units have poor mobility and cannot press the attack.

"Non-combat" units, such as terraformers and supply crawlers, cannot attack at all but can present a stiff defense when given "armor." Here again, one should assume that the units are equipped with powerful defensive weapons systems that do not permit meaningful offensive action.

Movement Speed and Range

Land units (rovers or hover tanks) should have a top speed between 30 mph and 50 mph *per point of movement allowance*. All ground vehicles should be designed to have some off-road performance, with off-road wheels, tracks, or a GEV skirt. *Sid Meier's Alpha Centauri* suggests that most "rovers" are wheeled vehicles, but the GM may wish to design tracked versions with lower top speeds but better off-road performance.

Sea units should have a top speed between 10 mph and 20 mph per point of movement allowance. "Foil" units (hydro-foils) will usually be near the top of this range, while "cruiser" units with standard hulls will be near the bottom.

Air units (needlejets, interceptors, copters, gravships, etc.) should have a top speed between 40 mph and 80 mph per point of movement allowance. Aircraft should be able to fly about 300 miles for every point of their *single-turn* range without needing to stop for fuel, repairs, or life-support replenishment.

Reactor

A unit's *reactor* in the computer game affects both its movement allowance and its ability to withstand combat damage. When designing the vehicle in *GURPS* terms, the reactor indicates what kind of power system it has, but is otherwise ignored. Outside of vehicle design, however, it indicates the robustness of the unit's logistical support.

Special Abilities

The following special abilities are available for units in *Sid Meier's Alpha Centauri*. Not all of them translate well into *GURPS* terms.

AAA Tracking: The unit has radar or AES A with at least a 40-mile range and both air-search and targeting capability.

Air Superiority: The unit is composed of aircraft designed for air-to-air combat rather than air-to-ground bombardment. It has long-range radar or AESA with both air-search and targeting capability. It also has viable air-to-air weapons (autocannon, missiles, or long-range energy weapons).

Algorithmic Enhancement: Members of this probe team have the best equipment, including advanced computer hardware and powerful intrusion software. They also have high levels in Social and Thief/Spy skills.

Amphibious Pods: The unit's vehicles are amphibious in design or carry fast, short-range landing craft.

Antigrav Struts: The unit uses either contragrav for lift or reactionless thrusters for propulsion. This increases the unit's movement allowance and range, and should be reflected in the computation of its top speed and endurance.

Blink Displacer: All vehicles in the unit have teleportation drives (see p. VE40), capable only of short hops in this setting.

Carrier Deck: The unit is an aircraft carrier, and includes vehicle bays for the storage of aircraft and a top deck large enough for the aircraft to land on.

Clean Reactor: The unit's vehicles have fusion reactors or similar low-maintenance, "clean" power sources. They also have either biomechanical or living-metal structures, allowing considerable self-repair.

Cloaking Device: The unit's vehicles are difficult to spot visually or detect with sensors except at very close range. They have some combination of emission cloaking, sound baffling, stealth, and chameleon systems (see pp. VE91-92).

Comm Jammer: Some of the unit's vehicles carry distortion jammers (see p. VE59).

Deep Pressure Hull: The unit is built with a submersible hull.

Deep Radar: The unit has access to extremely long-range sensors; e.g., radscanners or air-search AESA with hundreds of miles of range. It may also have access to cheap, robotic reconnaissance drones capable of searching out enemy troop formations at distances of hundreds of miles.

Drop Pods: Infantrymen or vehicles have parachutes or contragrav devices that permit airdrops from transport aircraft. If the faction has access to the Space Elevator, then the unit also has extensive life support and heavy contragrav units permitting it to make drops from orbit anywhere on Planet.

Empath Song: The unit's personnel have Telepathy Power and have been trained to use psionic attacks in combat.

Fuel Nanocells: Increases an air unit's movement allowance and range, and should already be reflected in the computation of its top speed and endurance.

Fungicide Tanks: The unit is armed with bombs or pods containing a chemical poison designed to kill fungus (see p. VE191).

Heavy Artillery: The unit can perform indirect fire missions against distant targets. Infantrymen carry mortars and similar small artillery pieces. Vehicles carry heavy guns or rocket launchers in high-angle or universal mounts (see p. VE45). In *Sid Meier's Alpha Centauri*, even units that apparently use *beam weapons* can be designated as heavy artillery! Assume that such units are using conventional projectiles or missiles in an indirect fire role.

Heavy Transport: Affects the unit's carrying capacity (see below).

High Morale: The unit's personnel are well trained, with high Combat/Weapon, Craft, and Vehicle skills. This ability affects the unit's Morale rating and will come into play in mass combat (see *Morale*, p. 126).

Hypnotic Trance: The unit's personnel possess Telepathy Power and training in the Mind Shield skill. They may or may not have other psi skills.

Marine Detachment: The ship's crew includes a detachment trained and equipped for effective boarding tactics.

Nerve Gas Pods: The unit is armed with pods containing nerve gas or other poisons deadly to human life (see p. VE191).

Non-Lethal Methods: Infantrymen or vehicles are armed with stunners, water cannon, and other non-lethal weapons suitable for police work. Personnel have also been trained to act as civilian police.

Polymorphic Encryption: The unit has been secured against probe-team intrusion. Electronic and mechanical security systems are common on equipment and vehicles, computers are equipped with liberal amounts of security software, and personnel are trained to detect and resist subversion.

Pulse Armor: Equivalent to the comm jammer ability, above.

Repair Bay: The unit includes complete workshops, cyberteks (p. 109), and nanotech facilities designed to repair combat units while they are being transported.

Resonance Armor: The unit's infantrymen and vehicles are protected by mechanical psi shielding (see p. VE92).

Slow Unit: Reduces the unit's movement allowance and range, and should already be reflected in the computation of its top speed and endurance.

Soporific Gas Pods: The unit carries tanks or pods containing sleep gas (p. VE191), or is armed with a hypnagogic projector (p. UT58).

Super Former: The unit carries advanced, high-TL terraforming equipment that allows it to build structures and perform terrain improvements more quickly.

Unit Size

Each infantry unit represents a *company* (100-300 men). However, the units are smaller in the very early stages of a game. In particular, the Scout Patrol units with which most factions begin the game probably represent platoons (30-60 men) or even squads (10-20 men).

Each ground vehicle unit (rover or hover-tank) represents 5-12 vehicles, a platoon of infantry support, and a logistical "tail" of mechanics with their equipment. Some units may have mixed composition, and may include repair rovers with large machine shops, troop transports, etc. Note that the Unity Rover unit is a *single vehicle*.

Each naval unit (foil or cruiser) represents one ship.

Each air unit (needlejet, copter, etc.) represents 2-6 aircraft with their logistical support (mechanics, loaders, air-traffic controllers, etc.). However, the Unity Scout Chopper represents a *single vehicle*.

A Terraformer unit represents 100-300 engineers, agronomists, technicians, etc. A Colony Pod unit represents about the same number of engineers, along with about twice that number of dependents and a great deal of equipment.

A Probe Team unit represents a squad of operatives (no more than 10 men) equipped with a variety of advanced sensors and covert-operations equipment, including computer intrusion devices and software. A squad of conventionally armed troops usually supports the probe team itself.

A captured or bred native life unit (mind worms, spore launchers, etc.) represents 1-3 telepaths and the boils, swarms, or colonies bonded to them.

Carrying Capacity

A sea unit that can carry land or air units aboard should be represented by a ship with about 25,000 cf of cargo space and room for about 200 passengers *per point of carrying capacity*. Early game transport units (notably the Unity Foil) may be much smaller, with just enough capacity to carry a single rover or squad of troops.

All vehicle designs should include provision for long-term occupancy: extra access space (see p. VE15), bunks or cabins, full life systems, etc. Even combat vehicles may carry their own crew quarters, full life systems, and small machine shops to perform field repairs. Vehicles should almost always be sealed, and grant access through airlocks. Vehicles intended for strategic maneuvering should carry power plants with very long endurance. The major exception to all these guidelines is aircraft, which need only be occupied for a few hours at a time.

Social Technology

In *Sid Meier's Alpha Centauri*, social institutions are among the technologies that may be researched. At Planetfall, every faction is organized in a simple fashion according to the needs of bare survival. Over time, the colonists become better able to engineer their social institutions to fit the needs of the moment or the demands of faction ideology.

The guidelines below explain how the various social technologies available in the *Alpha Centauri* game might manifest themselves in *GURPS* terms. The GM should consider the social choices that each faction has made in his campaign, and use these to present a fuller picture of faction society.

Social Engineering

Factions make deliberate choices regarding their social institutions in four distinct areas. Each choice becomes available at a specific TL. This TL does *not* indicate when the relevant concepts are first developed - even at Planetfall, the colonists had the whole range of Earth-born political and social theories to draw from. Instead, the TL at which a social "technology" appears indicates either the point at which a faction has sufficient population, wealth, and infrastructure to support the relevant institutions, or the TL when those institutions become *necessary* if a faction is to continue growing and implementing its basic ideology.

Note that each of the canonical factions has a *preferred* social choice, and is also *forbidden* to make certain social choices. These are expressions of basic faction ideology, as follows:

Faction Social Choices

Faction	Preferred Choice	Forbidden Choice
Cult of Planet	Green	Wealth
Cybernetic Consciousness	Cybernetic	Fundamentalist
Data Angels	Democratic	Power
Free Drones	Eudaimonic	Green
Gaia's Stepdaughters	Green	Free Market
Human Hive	Police State	Democratic
Lord's Believers	Fundamentalist	Knowledge
Manifold Caretakers	Planned	
Manifold Usurpers	Planned	Democratic
Morgan Industries	Free Market	Planned
Nautilus Pirates	Power	-
Peacekeeping Forces	Democratic	Police State
Spartan Federation	Power	Wealth
University of Planet	Knowledge	Fundamentalist

Beyond the forbidden choices, there is nothing to prevent a faction from setting up its social institutions as it pleases. In the computer game, even the "preferred" choices do not apply to a faction run by a human player. Thus if the situation seems to require it, the Lord's Believers could be democratic, the Human Hive could set up a eudaimonic society, or the University of Planet could enact a police state. The GM is encouraged to use the social choices to change the "default" flavor of each faction to suit his own campaign's needs.

Political Systems

One of the first decisions faced by each faction was its basic choice of political system. As soon as the everyday demands of survival were dealt with, each faction began to construct elaborate decision-making institutions in keeping with its basic ideology.

Frontier (TL8(P)): Every faction began its existence using this political form. It involves simple political arrangements, with little in the way of bureaucracy or formal political procedures. Decisions are made on the basis of what works in the short term, rather than on the basis of faction ideology.

Police State (TL8(C)): Citizens are kept under control using force and oppression. There are usually secret police watching fellow citizens for signs of political unreliability. Police states are often warlike; soldiers have high status and are likely to control the government. Faction ideology is much stronger than in frontier days, driving most decision making and receiving at least lip service from everyone.

Democratic (TL8(E)): Citizens are free and (usually) motivated to participate in their own government. Early on, citizen councils make most important decisions.

Later, factions spread across thousands of miles of territory find it easier to set up a representative government. In democratic factions, military institutions are under civilian control. Faction ideology is present, but leaders rely on persuasion to hold citizen loyalty, and permit dissent as far as possible. *Fundamentalist (TL8(D))*: Fundamentalist states need few oppressive institutions to remain stable. Instead, citizens remain loyal because they willingly hold strong common beliefs. Religious leaders make decisions, and the citizens are bound to obey religious law. The military is a strong institution, but is under religious control and may be thought of as the "hands" of the religious hierarchy. Faction ideology is so strong that it infiltrates every aspect of daily life for most citizens.

Economic Systems

As the factions began to exploit Planet's resources and produce new goods, they had to decide how to manage and distribute the resulting wealth. Each faction arrived at its own system of economic regulation. These systems sometimes appeared to be at odds with a faction's political structure: Planet saw politically oppressive states that allowed free enterprise, and democracies that imposed strict economic controls.

Simple (TL8(P)): In the early days after Planetfall, the colonists made economic decisions on an *ad hoc* basis. Under this economic system, most goods are scavenged from the landing and supply pods, or assembled using labor-intensive methods. Equipment is turned over to whoever needs it to perform his duties. Few colonists have significant personal property. There is no formal monetary system, and any trade between colonists probably involves barter.

Free Market (TL8(B)): Goods and services are produced by private firms and sold for profit. There is a strong incentive to become more efficient, so industrial methods improve rapidly. Every colonist has personal property, and the faction government must respect this. There is a formal monetary system, which may be backed by private financial institutions rather than the state.

Planned (TL8(D)): Private enterprise and the profit motive exist, but the government exercises a great deal of control over them. The government itself may own and manage some firms, or maintain a monopoly over certain kinds of business.

Obeying government regulations is more important than earning a profit, so management and production tend to be inefficient. Colonists may own private property, but there may be strict limits on how much they can own or how they can use it. There is a formal monetary system, which is backed and closely controlled by the state. *Green (TL9(E))*: Free enterprise exists, but is restricted by social regulation, with an emphasis on efficiency and protection of the environment. It is only allowed to proceed in ways that minimize harm to Planet's native life. The government watches each business closely, punishing those that are careless about the ecology, rewarding those that find ways to operate without harm. Colonists may own private property, but are limited in how they can use it. There is a formal monetary system, which may be run by the state or by private firms. This is usually supplemented by a state-run system of "green credits," which forces everyone to factor "harm to the environment" into any computation of costs.

Social Values

Once fundamental political and economic institutions were in place, each faction began to find ways to express its basic ideology through a choice of *goals*. The social values emphasized by a faction colored all political and economic activity. Social values acted to select which classes within society had the highest status and provided the largest portion of faction leadership.

Survival (TL8(P)): A faction dedicated to this value will usually place ideology to one side, not permitting it to override basic survival needs. All skilled technical professions are equally valued in appropriate circumstances. Administrative overhead is kept to a minimum, and no one works solely as a bureaucrat or administrator.

Power (TL9(C)): Military personnel hold the highest status. The faction devotes a large portion of its resources to military equipment and new weapons systems. The civilian economy, on the other hand, will probably suffer from neglect.

Knowledge (TL9(B)): Scientists, engineers, and teachers hold the highest status. Resources are poured into computer networks and advanced scientific equipment. Free speech and free expression are permitted, at least in the research community. This leads to rapid technological advances, but also fosters security risks as secrets escape.

Wealth (TL9(B)): Administrators hold the highest status, especially if they run wealth-producing enterprises. The most important jobs are those that extract resources and accumulate money (in whatever form the latter exists). The civilian economy dominates,

while the armed forces starve for support. Citizens who are mediocre at building wealth are often disdained, and may be resentful of their position.

Future Society

As time passed, each faction experimented with ways to integrate radically new technology into its social institutions. The resulting social forms often involved the use of technology to bring about fundamental changes in human nature. Some of these experiments were quite elaborate, leading to social forms that had only been imagined in Earth.

No Future Society (TL8(P)): The default social form, not characterized by any radical change in human psychology.

Cybernetic (TL12(D)): Human beings no longer fill most routine jobs; only critical decision-making roles, or tasks that require creativity, are left in human hands. In theory, this makes society much more efficient and frees human beings to fulfill their potential. In practice, workers displaced by automation are likely to be resentful.

Eudaimonic (TL13(E)): Citizens use genetic, bionic, cybernetic, and psionic technology to *improve* themselves. Stronger, longer-lived, more intelligent, possibly even wiser, these transhumans are better able to manage the needs of a complex society. Tolerance and justice become widespread, at least within the citizen body (the faction may remain hostile and aggressive toward outsiders). Conflicts remain, but are increasingly less likely to be resolved through violence or social oppression.

Thought Control (TL12(E)): Ultra-tech methods are used to make human beings more easily controlled by the social elite. Genetic engineering is applied to make most citizens nonviolent and pliable, unlikely to dissent or resist social control. Subtle neurochemical triggers pervade the air in every living space, pulling or pushing people into behaving in desired ways. Social leaders are likely to use genetic technology to become more charismatic, and develop psionic methods for controlling the masses. Crude, blatant techniques of oppression fade away, as the citizenry loses the very ability to consider resistance.

Social Factors

In *Sid Meier's Alpha Centauri*, social engineering techniques, and many of the fundamental properties of each faction, are implemented through ten *Social Factors*. Each Factor is represented by a numeric scale, usually running from -3 to +3. A value of 0 for a given Social Factor indicates that the faction's society is average or

normal in some respect, while values far from 0 indicate that the society is increasingly unusual.

GMs designing faction societies may apply the Social Factor scales to see how a faction's ideology and social engineering choices affect *individual characters*. Not all of the Social Factors from the computer game translate smoothly into character-level effects, but those that do will serve to describe the social environment in which the adventurers move.

This section lists the ten Social Factors and the items that affect them, allowing the GM to decide on reasonable values for each faction. For example, the GM may decide that the Peacekeeper faction exists in his campaign, and currently has made the Democratic, Planned, Knowledge, and No Future Society social choices. Relevant modifiers for Efficiency are -1 for being the Peacekeepers, +2 for Democratic, -2 for Planned, and +1 for Knowledge. The sum of these is 0, showing that all the Peacekeeper choices cancel out, giving the faction average Efficiency. For some other Social Factor, the Peacekeepers' choices might reinforce one another, making their society less typical in that respect.

Most of the Social Factor descriptions include a table indicating one or more effects that the Factor will have at the level of individual character action. Some Factors provide guidelines for *character design* for citizens in a faction. These should not be considered hard-and-fast rules. No Social Factor will affect the point cost of character traits or require an Unusual Background cost - although the GM may demand a good justification for a character trait that seems not to fit a given faction background. If a Social Factor affects the prevalence of a given character trait in a faction, this will be expressed in terms of a (very approximate) percentage of the population that holds that trait.

Economy

Economy measures the wealth-producing ability of a faction's society. Factions with high Economy ratings have plenty of buying power and high standards of living, while low Economy scores indicate poverty. The Industry Factor (p. 126) affects the supply of actual goods produced by the faction.

At the level of individual characters, Economy affects the distribution of wealth among a faction's citizens. The table below indicates the *normal* wealth level and *maximum* wealth level for citizens of a faction with a given Economy score.

It is reasonable for a given *faction* to have an average wealth level above or below the norm. The Wealth advantage and Poverty disadvantage are measured against average incomes for the entire population of Planet. Some factions will naturally have standards of living higher or lower than this mean.

Modifiers: Cult of Planet -1, Human Hive -2, Morgan Industries +1; Free Market +2, Wealth +1, Eudaimonic +2.

<i>Economy Score</i>	<i>Normal Wealth</i>	<i>Max. Wealth</i>
-3 or less	Dead Broke	Poor
-2	Poor	Average
-1	Struggling	Comfortable
0	Average	Wealthy
+1	Average	V. Wealthy
+2	Comfortable	Filthy Rich
+3	Comfortable	Multimil. 1
+4	Wealthy	Multimil. 2
+5 or more	Wealthy	Multimil. 3

Efficiency

Efficiency measures a faction's ability to apply wealth effectively. Factions with high Efficiency scores don't waste resources. They recycle well and invest in productive ventures. Factions with low Efficiency waste resources by using them ineffectively or applying them to unproductive activities. Low Efficiency ratings often indicate an intrusive bureaucracy, while high scores imply a society that is designed to operate with minimal intervention.

Efficiency does not translate well into *GURPS* terms. In general, the GM should present factions with low Efficiency as being snarled in red tape and mismanagement. Adventurers dealing with major institution in such a society will be constantly forced to waste time and effort on paperwork or unimportant tasks. Equipment will be poorly maintained and subject to constant breakdown.

In contrast, a faction with high Efficiency will work smoothly and with a minimum of bureaucratic intervention. Decisions will be made quickly and will rarely be reversed by higher authority. There will be a minimum of paperwork. Equipment will be well maintained, and will rarely break down.

Modifiers: Cybernetic Consciousness +2, Gaia's Stepdaughters +2, Nautilus Pirates -1, Peacekeeping Forces -1; Democratic +2, Police State -2, Green +2, Planned -2, Knowledge +1, Cybernetic +2.

Optionally, the GM may wish to apply Efficiency as a modifier to reaction rolls and Social skills when dealing with a society's bureaucracy.

Growth

Growth indicates how quickly the faction's population is growing. A faction with high Growth is one in which births outpace

deaths; the faction might even be using cloning or other technological means to grow its population. Low Growth indicates that births and deaths are closely matched, and the faction's population is stable. In the *Alpha Centauri* setting, high population growth rates usually indicate a faction that is *wealthier* than most, and can afford artificial support for the natural process of reproduction.

The table below gives a faction's population growth rate per Mission Year as a function of Growth.

Modifiers: Cybernetic Consciousness -1, Human Hive +1, Manifold Usurpers +1, Nautilus Pirates -1; Democratic +2, Green -2, Planned +2, Eudaimonic +2. A base with a children's creche in it will have higher effective Growth.

<i>Growth Score</i>	<i>Population Growth Rate</i>
-3 or less	0.5% or less
-2	1%
-1	1.5%
0	2%
+1	2.5%
+2	3%
+3	3.5%
+4	5%
+5	7.5%
+6 or higher	10% or more

Industry

Industry is a measure of faction productivity. It affects how much specific items cost in terms of resources and manufacturing time. High Industry means that goods and services are cheap, while low Industry means that they are expensive. Factions with high Industry scores are likely to be net exporters of goods, while factions with low scores will import goods.

In *GURPS* terms, this means that the *price* of all goods and services bought in a given faction's territory will be increased or decreased by a constant modifier; see the table below.

Note that the wealth level of a citizen is affected by the independent Economy Factor (see above). Once the factions begin frequent trading, it might be advantageous for PCs to purchase goods from high-Industry markets even if their home faction is not so fortunate. Of course, the faction government may put restrictions on imported goods . . .

Modifiers: Cult of Planet -1, Free Drones +2, Human Hive +1, Spartan Federation -1; Planned +1, Power -2, Wealth +1, Eudaimonic +2.

<i>Industry Score</i>	<i>Price Modifier</i>
-3 or less	+30%
-2	+20%
-1	+10%
0	None
+1	-10%
+2	-20%
+3	-30%
+4	-40%
+5	-50%

Morale

In *Sid Meier's Alpha Centauri*, the *Morale* Factor affects the level of training granted to new military units built by a faction. High Morale indicates that new units are well trained and determined. Low Morale indicates that military units are made up of green troops (possibly civilian militia or untrained conscripts).

In *GURPS Alpha Centauri*, *Morale* measures the martial ability of the *typical* faction member. Citizens who are currently serving in the military will naturally have higher levels of skill. On the table below, *Troop Quality* refers to the *GURPS* Mass Combat System (pp. CIII112-129); simulating the large-scale combats in the computer game is beyond the scope of this book, but GMs may wish to experiment with mass combat. *Weapon Skill* indicates skill level in the weapon skill most often used in combat by the faction, usually either Beam Weapons or Guns. *Tactics Skill* indicates skill level at Tactics. *Combat Reflexes* indicates how frequent the Combat Reflexes advantage is in the faction's population.

Modifiers: Gaia's Stepdaughters -1, Manifold Usurpers +1, Spartan Federation +2; Fundamentalist +1, Power +2, Wealth -2, Eudaimonic -2, Thought Control +2. Several base facilities can raise the effective Morale for units raised at that base (e.g., a command post raises the Morale for ground troops).

<i>Morale Score</i>	<i>Troop Quality</i>	<i>Weapon Skill</i>	<i>Tactics Skill</i>	<i>Combat Reflexes</i>
-2 or less	Raw	10	4	1% or less
-1	Green	11	5	1% or less
0	Green	11	5	2%
+1	Average	12	6	5%
+2	Average	12	6	10%
+3	Seasoned	13	7	20%
+4 or more	Veteran	14	9	50% or more

Planet

Planet indicates how much importance a society places on the native ecology. Factions with high Planet scores carefully

integrate their activities into the biosphere, doing as little damage as possible, possibly even taking up a symbiotic relationship with native life. Factions with low Planet scores take little care to avoid ecological damage, and may deliberately seek to wipe out native life.

In *GURPS* terms, the Planet score affects how members of a given faction interact with native life forms. It determines how frequent the Mind Worm Sympathy advantage is in the faction's population, and defines a blanket modifier to any reaction roll made by native life with respect to faction members, especially during capture attempts (see p. 19). The Planet score does **not** modify the Telepathy Power available during character design - that is defined by faction TL (see p. 56).

Modifiers: Cult of Planet +2, Gaia's Stepdaughters +1, Lord's Believers -1, Manifold Caretakers +1; Free Market -3, Green +2, Cybernetic +2.

Planet Score	Mind Worm Sympathy	Reaction Modifier
-2 or less	None	-18
-1	None	-12
0	1 % or less	-6
+1	2%	None
+2	5%	+3
+3 or more	10% or more	+6

Police

Police measures the strength and intrusiveness of faction government. Factions with a high Police Factor have large, active, even brutal police forces. Factions with low Police ratings are less interested in using force against their own citizens. As a result, they may have trouble dealing with social unrest.

In *GURPS* terms, the Police score is another way of describing a society's Control Rating (see p. B249). A faction will not routinely use nerve stapling (p. 107) against its own citizens unless it has a Control Rating of at least 4 (Police score of 0 or higher).

As well, citizens of factions with Police scores of +1 or less dislike military adventures, and may protest if the faction sends military units outside its territory - although individual citizens are no more likely than usual to have the Pacifism disadvantage. Citizens of factions with Police scores of -3 or less often *do* have the Pacifism disadvantage; social protests against military action are almost inevitable in such societies.

Modifiers: Data Angels -1, Gaia's Stepdaughters -1, Spartan Federation +1; Police State +2, Free Market -5. Cybernetic -3, Thought Control +2. The negative modifier for the Cybernetic social choice is

waived if the faction controls the Network Backbone (p. 77).

Police Score	Control Rating
-4 or less	0
-3	1
-2	2
-1	3
0	4
+1	5
+2 or more	6

Probe

Probe determines two things. First, it describes how easy it is for enemy probe teams to operate in faction territory. A low Probe score indicates an open society that welcomes visitors and is unconcerned with security. A high Probe score indicates a faction that invests a great deal in security, and that is too regimented (or too fanatical) to offer a probe team much opportunity for success.

Second, the Probe rating indicates how accomplished a faction's *own* probe teams are likely to be. A low Probe score means that the faction is not interested in using covert tactics against others, while high Probe indicates both willingness and great skill at such maneuvers.

In *GURPS* terms, Probe measures the covert-operations potential of the *typical* faction member. Citizens who are currently serving in a probe team will naturally have higher levels of skill. On the table below. *Covert Skill* indicates the highest level of skill held by the typical citizen in a Thief/Spy skill (most often Computer Hacking). *Sense of Duty* indicates how frequent Sense of Duty (Faction) is in the faction's population. There will usually be one citizen with Fanaticism (Faction ideology) per 5-6 with Sense of Duty (Faction).

Modifiers: Data Angels +2, Lord's Believers +1, University of Planet -2; Fundamentalist +2, Knowledge -2, Thought Control +2. Note that the Hunter-Seeker Algorithm (p. 68) can make even a low-*Probe* society immune to probe-team attacks, although the faction will still be unable to use its own probe teams effectively.

Probe Score	Covert Skill	Sense of Duty
-2 or less	10	1% or less
-1	11	2%
0	11	5%
+1	12	10%
+2	13	20%
+3 or more	14	50% or more

Research

In *Sid Meier's Alpha Centauri*, *Research* affects the time it takes a faction to develop new technologies. Factions with high

Research scores climb the "tech tree" quickly, reaching pivotal technologies before their competitors. Factions with low Research are poor at R&D, and must trade for (or steal) technological secrets.

Research does not translate well into specific *GURPS* mechanics. In general, factions with high Research should have the best available computers, sensors, and scientific equipment. They should invest heavily in scientific research, and adventures involving their citizens will often turn on technical details. Factions with low Research should lag behind, with dated equipment and little interest in original development.

Modifiers: Cybernetic Consciousness +2, Free Drones -2, Lord's Believers -2, University of Planet +2; Fundamentalist -2, Knowledge +2, Cybernetic +2.

Optionally, the GM may wish to apply Research as a modifier to invention rolls (see pp. B186-187) whenever the faction government is backing the effort.

Support

In *Sid Meier's Alpha Centauri*, *Support* indicates how many military units a given base can support "for free," without having to allocate resources to their maintenance. This can be considered an abstraction, allowing (even encouraging) factions with high Support Factors to maintain large standing **armies**.

In *GURPS Alpha Centauri*, *Support* is interpreted as a **very loose** indication of how much of a faction's population has full-time military duty. This includes offensive units, standing garrisons, and internal police. The effect on individual characters is indirect. *Support* may provide a guideline to how many PCs might have a military background, but note that the number of people with military *experience* is always several times the number who are currently serving. *Support* may also indicate how often adventurers come into contact with military matters. GMs who want a campaign centering on military adventures may want to focus on a faction with high *Support*.

Modifiers: Morgan Industries -1; Democratic -2, Police State +2, Power +2, Thought Control -3.

Support Score	Full-Time Military
-4 or less	1 % or less
-3	1.5%
-2	2%
-1	<u>2.5%</u>
0	3%
+1	3.5%
+2	4%
+3 or more	5% or higher

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HUMANITY'S LAST HOPE

"Firebase Alpha, say again."

"Mind worms! They're all around us! I can hear them, they're in my head, I'm burning alive, oh, God . . ."

"Hold on, Firebase Alpha. Help is on the way."

Earth is dead – but in the last years before the catastrophe, the starship *Unity* was launched. The ship carried a few thousand colonists to the nearby Alpha Centauri system, where they were to build a new Earth on the world called simply "Planet."

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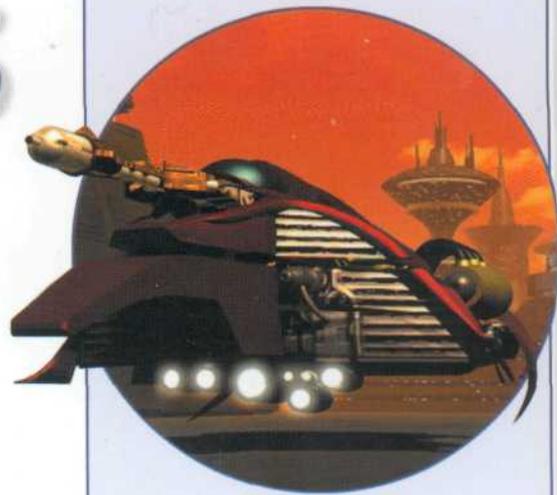
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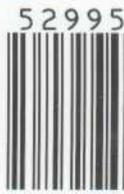
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