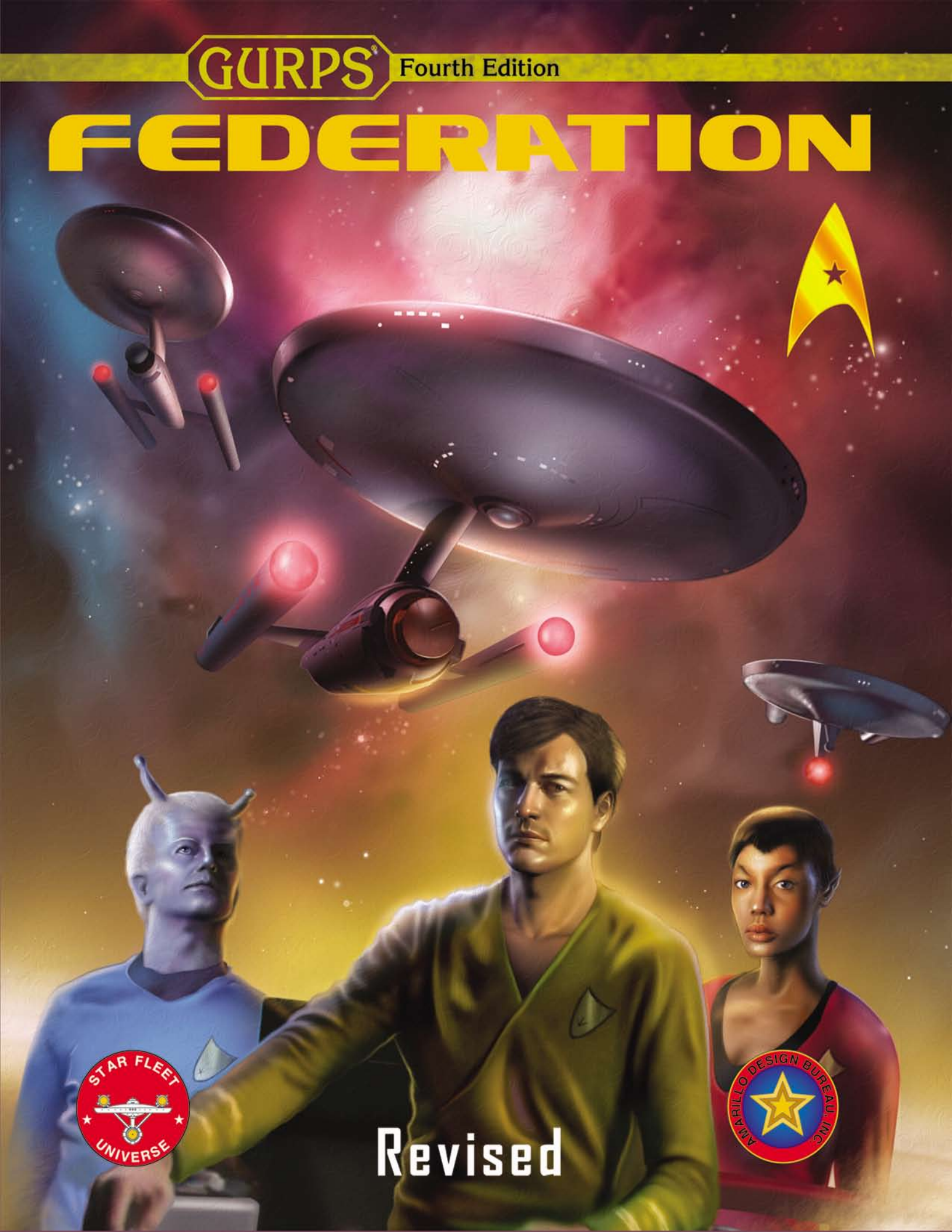
GURPS Fourth Edition

FEDERATION



Revised

GURPS FEDERATION

The Good Guys of the Star Fleet Universe

2nd Printing — updated for GURPS 4th Edition

Written by John Sickels.

Additional material by Steven P. Petrick, Al Beddow, Gary Plana, Hugh Bishop, James E. Goodrich, and Stephen V. Cole.
Edited by Jean Sexton.
Cover by Dennis Calero.
Illustrations by Alvin Belflower, Dan Carroll, Ted Geibel, Loren Knight, Jim McGonigle, Dale McKee, and Adam Turner.
Graphics by Adam Turner and Stephen V. Cole.
Frigate deck plans by Nick Blank.

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GURPS System Design by Steve Jackson.
GURPS Line Editor: Sean "Dr. Kromm" Punch.
SJ Games Playtest Review by Robert Gilson.

Project Staff: Gary Plana, Loren Knight, James E. Goodrich, Bob Gilson.

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ANOTHER NEW WORLD

by John Sickels

Planetary Survey Log, October 24, Y166, 0815 Hours Local Time, Dr. Kenneth Atchison Recording

"We are approaching planet MW-537-V. For the last two hours, the *Speedwell* has tried to contact the advance scout who preceded us to the planet six months ago. So far he hasn't answered. We will be directly above his encampment in 10 minutes and hopefully will make contact then. Assuming no complications, the team will shuttle down with our equipment later this afternoon. Our compliments to Captain Kuo and the crew of the *Speedwell,* who have made our journey here comfortable. I personally recommend that Luna University renew the *Speedwell*'s transport contract for the coming fiscal year. Log recorder off."

Atchison's Cabin, *Speedwell,* Orbiting Planet MW-537-V, October 24, Y166, 0822 Hours Local Time

"That was boring," teased Maiah. Ken flipped the recorder switch off and turned to face his wife. She pulled a black t-shirt down around her body, her torso twisting in the cramped confines of their cabin. "You really need to make those more interesting." She winked at him, her blonde Alpha-Centauran locks framing her thin face. It always drove him crazy.

"Let's keep the interesting stuff for our personal logs," he replied. He got up from his chair and threw his arms around his wife, planting a passionate kiss. Ken planned on throwing her onto the bunk, but they stumbled backward instead, off-balance, crashing onto the cabin deck plating of the *Speedwell.*

"Ouch, bad man!" She pretended to be angry, then kissed him. "Bad man" was a common AlphaCent phrase of endearment. It rubbed many Earth humans the wrong way, but Ken had grown used to it over the years.

The intercom interrupted their passion. "Bridge to Atchison."

They broke their kiss. "Atchison here."

"We'll be in orbit in about five minutes, Doctor, in case you want to be on the bridge."

"Let the rest of the team know, too. We're on our way, Captain."

"So much for . . ." Maiah's voice trailed off.

"Yeah, it's going to get busy. But we'll find the time."

"I always make sure of that, bad man." She kissed him hungrily.

Bridge, *Speedwell*

The *Speedwell's* small bridge was even more cramped than usual, the seven members of Luna University Planetary Survey Team Nine crowding in to look at the planet on the viewscreen.

Speedwell was a Free Trader, one of thousands of externally similar, general-utility cargo ships around the Federation. It was a starship, with all the nominal capabilities of a fleet heavy cruiser, just not as many of them. It had a crew of 20 instead of 400, five security men instead of 50 Marines, one tractor beam and one transporter instead of three of each, a medic instead of a surgical staff, half of the cargo volume, about the same passenger accommodations, a pair of phasers (and no photon torpedoes) instead of a dozen, enough sensors to scan a planet in about a week instead of a few hours, but whatever you wanted a starship to do, *Speedwell* could do it. Some Free Traders were fitted to carry more or fewer passengers, to have more weapons, or with extensive laboratory facilities (or none at all). The Star Fleet Marines even used modified Free Traders to land tanks on alien planets.

MW-537-V, a very typical Class-M world, filled the screen as the ship took up position over the scout's encampment. This new world featured two large continents, plus numerous islands and archipelagos. The atmospheric envelope had a slightly purplish tinge.

"Geosynchronous orbit established," said the Tellarite first mate. "Still no answer to our hails."

"Take a sensor scan," said Kuo. "Any humanoids down there?" There was always the chance that something had happened to the scout.

"Checking . . . he's there, about three klicks from the camp . . . moving slowly. Looks like he's out for a walk or something. Probably doesn't have his communicator with him."

"Or he just doesn't care to answer," said Atchison.

"Well, do we keep hailing or do we just go down and knock?" asked Dr. Elur, the team's Andorian biologist and physician.

Rema Isabe, the team's Cygnan security officer, grunted his agreement.

"It's your call, Ken," said Kuo.

Atchison considered the options.

"Isabe, you beam down with me. We'll make sure everything is OK before the rest of you come down in the shuttles."

Encampment One, Southern Continent, Planet MW-537-V, October 24, Y166, 0902 Hours Local Time

Atchison and Isabe materialized a short distance from the encampment. They were on a steep hill overlooking a large open field, surrounded on two sides by a grove of trees. A shallow brook flanked the fourth side, water trickling gently toward a small lake about one kilometer distant. The scene was idyllic, although Atchison had done

enough planetary surveys to know that appearances were often deceiving.

"Scanning," said Rema Isabe in his pronounced Cygnan tone as he activated his tricorder.

Atchison flipped open his communicator. "Landing party to *Speedwell*, transport complete. Stand by while we make contact."

"Message acknowledged, landing party."

"He's on the other side of that grove of trees, moving this direction," said Isabe, his scan complete. "Be here in about five minutes at his current pace."

"Let's take a look."

The two men walked down the hill toward the camp. An insect buzzed Atchison's head; he instinctively shooed it away. He noticed an odd scent in the breeze . . . not a sweet odor exactly, hard to pin down . . . pollen of some kind? *Something we'll figure out soon enough,* Atchison thought to himself.

"That sky looks a lot like Moore's Planet," commented Isabe.

Atchison looked up for the first time, noticing the purplish blue tint to the atmosphere. Indeed, it did resemble the last planet they'd surveyed. Puffy cumulus clouds drifted by.

"Yeah, it sure does."

The two men entered the encampment, not wanting to snoop too much but casually observing the environment. The scout's portable personal shelter was on the east edge of the camp. On the west edge was another shelter being used to store equipment and there was space already cleared for several others. A portable fusion generator provided power for the shelters, a Star Fleet Marine-issue camp cooking unit, a computerized weather station, and a general-duty replicator, apparently seldom used. The southern edge of the encampment featured a traditional campfire, ashes left over from the previous night. Scientific equipment of various sorts was scattered about, the camp demonstrating a curious mixture of order and chaos. The entire setup reminded Atchison of his childhood days camping as a Youth Scout back in Australia.

Atchison and Isabe settled near the center of the camp, beneath a large dining fly. A communicator sat on the table underneath the fly.

"There he is," Isabe said. Entering the camp was a burly, bearded, rough Rigellian, wearing a pale-red utility jumpsuit and light windbreaker jacket and carrying an old-style laser hunting rifle. Atchison and Isabe left the dining fly and walked toward him. The Rigellian approached them somewhat warily.

"Greetings, Mr. Ecirp. I'm Dr. Kenneth Atchison; this is my associate, Rema Isabe."

The Rigellian gave the barest hint of a nod.

Atchison shifted his feet and cleared his throat.

"We're from the Luna University, here to begin the next phase of the survey."

"I know who you are. Didn't expect you just yet."

"Our arrival was scheduled well in advance," said Atchison. "We're on time."

"Well, you're here now. Nothing I can do about it." The Rigellian scowled, looked them over, then seemed to relax a bit. "My name is Ecirp. I need some recfe." He turned and walked toward the storage shelter.

"Not very personable, is he?" asked Isabe.

"Ever met a lone scout who was?" replied Atchison.

Ecirp returned from the shelter, bearing a brown beverage packet and an ancient campfire percolator. He seemed a bit friendlier. Atchison had read Ecirp's personnel file, of course, before setting out on the mission. Despite his "mountain man" appearance, Ecirp was a highly trained scientist with a doctorate in planetary science and master's degrees in biology and astrophysics. He'd worked for a mining corporation for almost 30 years, but had become an independent scout after his wife died a decade ago. Ecirp had been living on MW-537-V for six months, studying it and doing the basic pioneering work. He would stay another six months, according to plan at least, showing the team around and familiarizing them with the planet. The *Speedwell* would return at that point, dropping off more supplies for the team, and taking Ecirp on to his next destination.

"Good thing you are here I suppose. I'm almost out, and the replicator can't make recfe worth a damn. Does all right on your human coffee, but not the good Rigellian stuff. You did bring a case of recfe, didn't you?"

"I think it's on the manifest, yes."

"Good. Part of my contract, you know. You want me around another six months, you provide recfe."

Ecirp walked over to the remnants of the campfire, Atchison and Isabe trailing behind.

"Mr. Ecirp, we need to get the rest of my team down here and begin transporting our equipment and supplies, better part of a day's work. If you'd like to transport up for a medical checkup, or a warm shower, or if you have any additional needs, we can . . ."

"My only need right now is some warm recfe." The Rigellian gathered some kindling and threw it on the smoldering embers, which quickly flared up. "Most of the wood here burns well. I'll show you which trees to avoid; some of them stink like Gulgnar's Maw if you burn them." He set up the percolator, his back turned to Atchison and Isabe.

"Um, the medical checkup is mandatory, if you'll recall the University's regulations." Ecirp ignored the comment. A silent moment passed.

"Mr. Ecirp, I must contact the *Speedwell*. We need to . . ."

"Yes, yes, do whatever you need to do. And it's Ecirp, not 'Mister' anything. Got that straight?" the old Rigellian said irritably.

Atchison signed inwardly. Six months with this grouch didn't seem like a pleasant prospect.

"Landing party to *Speedwell.* Contact with scout established. Stand by to begin landing supplies and personnel."

Encampment One, Southern Continent, Planet MW-537-V, October 24, Y166, 2250 Hours Local Time

The rest of the day was a series of shuttle landings and transporter drops, equipment unloading and positioning. The first priority was setting up additional shelters to house the survey team. Equipment was unloaded in a specific order, designed for easy access and activation in the coming days and weeks. Each member of the team, plus the crew of the *Speedwell,* knew exactly what to do, having gone through the procedure on other survey missions.

Although he refused to transport up to the ship, Ecirp was given his mandatory physical by Dr. Elur, thanks to the Andorian's trusty medical tricorder. By the end of the day, the team was tired, but content from a productive day of labor. They gathered under the dining fly for the evening meal: a home-cooked genuine beef roast courtesy of Captain Kuo and the *Speedwell*'s galley, accompanied by carrots, Tellarite figs, and fresh Rigellian leras fruit for desert. The menu was enjoyed by everyone except Sarest, the Vulcan member of the team, who dined on plomeek soup.

"This isn't bad," commented Ecirp as he finished an overly large bite of roast, "but in the morning I'll hunt down a better evening meal for you. Small herbivores graze down by the pond, just before dawn. The meat's not bad."

"Have you analyzed the nutritional content of the meat?" asked Dr. Gloria Fernandez.

"Eaten it about twice a week the last few months," answered Ecirp over his chewing. "Good change from the rations or the replicator. I haven't keeled over yet."

"Yes, but . . ."

"I know what you're asking, yes, it's all in my studies," replied Ecirp. "I know my job. You know yours?" He gave Gloria a dark look and took another bite of roast. Annoyed, Fernandez glanced over at Dr. Michiko Soejima, who shrugged and mouthed "let it go" to her companion. Gloria stifled the comment she was about to make about Ecirp's attitude.

"Have the herbivores discovered that you are a predator yet?" asked Atchison.

"Don't think so. They don't seem too bright."

"Surely there are native predators that hunt them," commented Sarest.

Ecirp looked at Sarest. "My wife used to work for a Vulcan. I never liked him much." He took a swig of water. "Of course there are predators. Some come around at night, one type in particular, like a cross between a big Rigellian ferret and a Terran dog. That's in my report, too. No primates though. And the herbies don't seem to have noticed that me and my rifle are a threat yet."

Ecirp belched. He seemed to take pride in being as uncouth as possible. He rose from the table.

"Well, time for bed. The perimeter alarm is set, but I've never had much trouble at night. Most of the animals stay away. Gotta watch out for the small rodents, though. They'll get into your food if you don't store it right." Ecirp left the group and headed toward his personal shelter.

"What a jerk," said Maiah.

"Spending the next six months with him is not my idea of a good time," added Isabe.

"Stow it," said Atchison. "He's been alone for six months. Give him a chance." He was a bit worried that Isabe had taken a strong dislike to Ecirp so quickly.

The communicator chirped. "*Speedwell* to landing party, come in." It was Captain Kuo.

"Atchison here, *Speedwell*, go ahead."

"We've finished seeding the weather and communications satellites in orbit, and the data feeds read active with your portable computers and tricorders. Everything set up down there, Doctor?"

"Hold one moment, Captain." Atchison glanced at Sarest, who pulled out his tricorder. The Vulcan checked the data links and nodded.

"Affirmative, Captain. All is well."

"Any further needs, Ken?"

"I don't think so, Captain. We're ready to settle down for the night."

"I have enough slack in the flight plan that we can remain in orbit until dawn if you like."

"Thank you, Captain, but that won't be necessary. The checklist is complete and we have no problems here."

"All right, Doctor, we will be leaving for our next destination. See you in six months."

"Very well *Speedwell,* have a safe journey."

"Enjoy your stay. *Speedwell* out."

"It always makes me nervous when they leave," Michiko said.

"You say that every time," replied Gloria, "and within a week you'll be so obsessed with weather patterns that you'll forget all about your worry, and about me sometimes too." She smiled. Michiko gave an embarrassed grin.

"Well, let's clean up," said Atchison. "Maiah and I will handle KP for tonight, and we'll get started with the regular cooking and camp schedule tomorrow. Get some good rest, everyone. We will get started with the staff meeting at 0800 tomorrow."

"I want to do a perimeter check before turning in," commented Isabe, "make sure the alarms are set."

"Fine with me, Rema, as long as you're up and about by 0800." Atchison knew that his Cygnan friend usually had trouble sleeping the first few weeks on a new planet. While on board the *Speedwell,* the team had synchronized their sleeping patterns to coincide with this time zone and the planet's 26-hour day, but it always took Isabe extra time to adjust. Isabe went to his shelter, picked up his phaser rifle and tricorder, and began a long walk around the perimeter of the camp.

Atchison and Maiah gathered the utensils and dishes, while the others made their way to their shelters. Traditionally, Atchison's team used old-style camping pots and pans to prepare the evening meal two or three times a week. The fusion-powered portable kitchen was a great labor-saving device, but part of the team's task was to assess the suitability of local food sources: plants, animals, etc., since the colony would eventually have to produce its own food in order to be self-sustaining. In addition to determining nutritional content and health suitability, it required actual cooking. Ecirp had already done some of that work, and both Dr. Elur and Dr. Fernandez were well-trained in the discipline of exogastronomy.

As he scrubbed dishes, Ken looked up at the stars, noting an aurora-like glow forming along the northern edge of the horizon. The planet had significant ionization in the upper atmosphere, resulting in this beautiful display on clear nights, though reports indicated it could interfere with communication signals. The satellites would compensate for that, of course.

"You missed a spot, bad man," teased Maiah. "Look at the dishes, not the stars." He almost replied with a suggestive innuendo, but settled for a leer instead. She giggled. The first night on a new planet was almost always fun.

Encampment One, Southern Continent, Planet MW-537-V, October 25, Y166, 0725 Hours Local Time

Ken awoke with an ache in his back, Maiah gently snoring next to him. Maneuvering himself quietly out of bed so as not to disturb his wife, he used the shelter's latrine, then popped an analgesic pill for his back pain. Glancing out the front of the shelter, he saw that Gloria and Michiko were already awake, drinking coffee under the dining fly. Sitting outside his own shelter, Dr. Elur was doing stretching exercises. Sarest, Isabe, and Ecirp were nowhere he could see, possibly still sleeping, exploring, or tending equipment out of his sight range. The sun was bright and wispy clouds floated by, a beautiful day.

Ken picked up a PADD and sat down at the work station/desk within the shelter. He decided to let Maiah sleep a bit longer and to review the day's work schedule in the meantime.

MW-537-V was technically at Pre-Colonization Phase D: Pioneering. The planet had been discovered by an automated probe nine years ago, then visited by the survey ship *Amerigo Vespucci* six years later for an initial survey. Allocated by the Federation to the United Earth Government as a general mixed colony, the world was intended for both agricultural and industrial production as well as an outlet for population growth. Monsanto had won the bidding for the agricultural facilities, while Weygand-Yulani and Taggert Pan-Galactic had formed a joint venture to exploit the deposits of iridium and platinum detected by automated probes on the northern continent, all under contract with the UE government. Luna University was contracted to provide an objective study of the planet, and confirm the early survey results. Ecirp's pioneer work had been the first step in this process, his mission to confirm that the planet, or at least this initial colony site, was livable. Now their task was to study the planet in greater depth, in preparation for the arrival of the first wave of 150 colonists, tentatively scheduled in another 18 months.

As the team leader, Atchison's task was to coordinate everyone's research, making sure that everyone was working on the same page, that work wasn't being unnecessarily duplicated, and that both the general and specific goals of the mission were met. The oldest of eight children, Ken learned both leadership and teamwork growing up back in Rockhampton. The 0800 meeting would begin the process formally, each person presenting a plan for action and study, while Atchison determined priorities and resource allocation, such as use of the shuttlecraft, use of the orbital satellites, who got to use the most computer time and when, etc. Atchison would also compile all reports and make sure they were properly transmitted to higher authorities at regular intervals. The communications satellites left in orbit by the *Speedwell* provided a link with the Federation's subspace network, as well as enabling team members who might be exploring different parts of the planet to remain in contact. A hand-communicator could not reach the satellites, but it could reach the base camp and an automatic relay. For deliberate trips away from camp, a larger communicator (able to reach the satellites) was carried. The ground stations sent a burst transmission to the satellites every hour, with weather data, any messages deliberately added, copies of communicator transmissions, and a passive sensor sweep of the camp. The satellites kept the last 30 of these transmissions in a buffer, and if the transmissions stopped, would store whatever they had on file and send an alert message into the subspace network.

Ken's wife Maiah was the geologist and cartographer, charged with studying the planet's geology, mineral resources, and geography. The team had worked together long enough that there was no question of favoritism or bias when it came to Ken making decisions about Maiah's work. Fortunately their marriage was strong enough to survive working together on the same project, something that they had seen harm many other relationships. The biggest problem they faced was with Maiah's traditionalist AlphaCent relatives, most of whom didn't understand why she had married a Human.

The Andorian Dr. Elur was the main biologist and also served as the expedition's physician. He would study the plant and animal life of the world and also watch for any disease organisms which might impact the group. Elur had taken a vow of poverty and chastity as part of his religious training many years ago. He was a member of the An-

dorian Senthei sect of healers, who saw their calling to medicine as a spiritual task. He was trusted implicitly by the rest of the crew, a prerequisite (in Atchison's opinion) for any successful physician.

Michiko Soejima, a human from Vega Colony, was the expedition's meteorologist and was also the official second-in-command to Atchison. She was cross-trained in geology and would assist Maiah when necessary. Like Atchison and Isabe, Michiko was ex-Star Fleet and acted as a sort of informal "security" officer when needed.

Gloria Fernandez, from Novelda, Spain, on Earth, was the lead botanist and ecologist, working closely with Dr. Elur in studying the native life forms. In addition to her scientific degrees, she held a bachelor's degree in comparative theology and was the group's informal spiritual advisor and morale officer.

Other than Maiah, Atchison's best friend was Isabe, the Cygnan "muscle" of the group. Although he was the only member of the team without at least one doctorate, he was highly intelligent, and a capable "fix-it" man when it came to repairing equipment and keeping everything operational. He was also a skilled hunter and tracker, and took his security and protection responsibilities very seriously. A former captain in the Star Fleet Marines, Isabe was discharged after being accused of violating the Prime Directive while serving aboard the starship *Hood* eight years ago. Atchison, who had been *Hood*'s assistant science officer before leaving the service for greener pastures, had hired him as the "security muscle" for the survey team a few years back. Atchison felt that Isabe had been railroaded in the court-martial and made a scapegoat for the actions of higher officers. He knew Isabe well and the man had always acted in good faith.

The only group member who was an outsider was Sarest, the Vulcan generalist with expertise in many different disciplines. He would "float" from assignment to assignment as needed to support the others. He was also a qualified shuttle pilot, like Isabe, Michiko, and Ken himself. Sarest was the newest member of the team, and had been assigned at the last minute when Dr. Gordon had been transferred to another team by the University over Atchison's objections. Sarest had previously worked for private industry and this was his first mission for the University. The loss of Gordon and the substitution of Sarest had been the only "glitch" in this assignment so far.

Atchison accessed the PADD's data menu and saw that Gloria and Michiko had already submitted their work requests for the week. He decided to wait on that until the meeting itself, skipping instead to Ecirp's pioneering logs. Despite the scout's grizzled appearance and gruff demeanor, he'd submitted what looked like a very detailed report regarding his experiences and discoveries. Atchison couldn't wait to dig in.

"Good morning, my loving bad man," Maiah cooed. She stood before him in all her glory.

He smiled broadly at his mate, then came back to reality long enough to glance at the shelter's chronometer. 0741. Not enough time. Damn.

"Sorry, my dove. We better get showered; the meeting starts in 20 minutes."

She threw a pillow at him.

Encampment One, Southern Continent, Planet MW-537-V, October 25, Y166, 0803 Hours Local Time

The team gathered under the dining fly, replicated coffee and doughnuts on the table.

"Good morning, everyone. Anyone seen Ecirp?" The Rigellian was missing. No one had.

"I'll check his shelter," responded Isabe.

"In the meantime, let's get started. I'd like to spend this morning finishing the equipment setup and making sure everything that needs to be running is doing so. Standard schedule like on our last assignment, we meet at 0800 for the daily meeting over breakfast. You are free to eat lunch on your own, but the evening meal at 1900 is mandatory unless you are out of camp on a mission. The setup should be complete by this afternoon and you can get started on your individual projects then. Any objections? Good. To business then. Dr. Elur?"

"I want to begin with a detailed ecological study of the surrounding area. Ecirp's log contains his observations but much more needs to be done. The data from the biological sampler indicates that the local flora utilize a rather unique set of nucleic acids, more like life forms typical to a Class-K ecosystem than a Class-M, despite the planetary classification. I can do the preliminary study myself but would require Gloria's assistance later."

"Gloria?"

"No problem, Elur. I can help with that. I noticed the same thing and have it on my list. But I'd like to develop a matrix of the ecological chain first, look for any unusual variations."

"Fair enough. Your turn, Michiko."

"It will take me a few days to analyze the weather autostation reports and Ecirp's logs," she said, "but just from the early data, this area still looks like a prime colonization site. Temperate climate, moderate precipitation. Perhaps a bit cold in the winter months, but not too bad. I will take some soil and silt samples of course, help determine the longer-range cycles. I'll need some shuttle time to gather core samples from glaciers and ice packs later this month."

"How soon?"

"I've got enough data here to keep me busy for at least three weeks. No rush."

"That's good, then," said Maiah. "I need the shuttle to explore the projected mining sites. I'd like to get started on that."

"How soon?"

"Tomorrow morning, if I can. Some preliminaries to finish first."

"We can do that." Atchison made a notation on the PADD.

"Sarest, I'd like you to assist Dr. Elur today, but tomorrow you will accompany Maiah on her research trip."

"As you wish."

Isabe returned to the dining fly, a look of concern on

his face.

"Ecirp isn't at his shelter."

"He's probably out hunting."

"Maybe, but he knew about the meeting."

"Well, like I've said before, he's not used to people."

"You need to stop making excuses for him, Ken," said Maiah, "He should be here."

Atchison paused. Had he not been taking Ecirp's antisocial behavior seriously enough?

"All right, let's figure out what's going on." He flipped open his communicator. "Atchison to Ecirp. Come in, Ecirp." There was no answer.

"He didn't leave his communicator in his shelter," said Isabe. "If he has it with him, it's either shut off or he's just ignoring us."

"Tricorder scan, then."

"Nothing."

"*What?*" Maiah and Sarest activated their tricorders to confirm Isabe's readings. The link with the satellites in orbit enabled the tricorders to extend their scanning range significantly.

"Nothing, he's not within five klicks of the camp."

"Widen the scan!"

"Still nothing. No humanoid life forms except us."

"Link up with the satellite to boost the maximum scan radius."

"Already did. Nothing."

"I've got his communicator transponder located," said Maiah, "down by the lake."

"Focus the tricorder scan in that area. At least we know where to start. He could be seriously injured, not dead. Sometimes weak life readings won't show up on a scan if the conditions aren't perfect."

"Picking up an intermittent life reading now."

"Rigellian?"

"Can't tell, it's very weak."

"All right, everyone, let's find out what's going on."

"We should leave someone here to guard the camp," suggested Isabe.

"What about the shuttle?" said Maiah, "We could search from the air."

"Agreed on both counts. Sarest, Gloria, you stay here. Get the shuttle prepped for launch in case we need to search. Send a signal to the *Speedwell*, inform them we may have a medical emergency and might need them to return quickly. Elur, get your med kit. The rest of you, grab your getaway bags; let's head to the pond."

It was a rule that nobody left camp without their "getaway bag." This was an alien planet, and anyone who left camp, even to go just a few hundred meters, could get lost or in trouble. Everybody's "bag" was different . . . and most of them weren't bags. Gloria preferred a fanny pack, while Atchison preferred a small rucksack. Sarest wore a vest, and Isabe preferred well-worn Marine "web gear." The others had made other choices. Everybody's "getaway" included three days of rations, a multi-tool, a first-aid kit, their phaser, a canteen, a pack of water purification tablets, their tricorder, and a spare communicator. Everybody had added a few personal items – a knife in Isabe's case, a hundred meters of polymer cord in Maiah's – that they thought would be (or had previously found) useful. Most had a spare pair of socks. Everybody kept their bag ready to go and close at hand. When returning to camp, the first thing to do was to restock the "getaway" just in case something came up. Wherever you went in camp, your "getaway" was within five meters, and ready to be grabbed at a dead run. When planning for a longer trip, a full backpack was added to the "getaway," but no team member was ever far from his "getaway."

After grabbing their gear, the party headed down the bank of the creek along a path trampled down by Ecirp over many months. Isabe had the point, phaser rifle ready, followed by Atchison, Maiah, and Michiko, armed with phaser pistols, and Dr. Elur with his medical tricorder.

"Anything?" Atchison asked Elur as they approached the pond.

"No life signs, lost the signal. But his communicator is just ahead."

Isabe motioned everyone to stop.

"See anything?" Atchison whispered.

"Right there." Isabe pointed to a bundle of clothing on the edge of the lake. "Let me check."

Isabe moved forward, conducting a scan with his tactical tricorder. He reached the pile of clothing, poked at it with his rifle, then waved the team forward. The communicator was attached to Ecirp's utility belt, next to the clothes.

"Nothing here. Just clothes. There's his communicator." Isabe picked it up. "Working order, he just wasn't here to answer it."

"Looks like he went for a swim," said Maiah. "Maybe he drowned?"

"No, the tricorder doesn't show anything in the water except fish and small amphibians. We'd pick up even a corpse at this distance."

"Maybe something ate him," Michiko said morbidly.

"No signs of large animals," said Dr. Elur.

"At least not that you can detect," said Atchison. "Let's keep all options open. We don't know what we are dealing with here. We definitely need to get the *Speedwell* back here, though." He flipped open his communicator.

"Atchison to base camp, come in."

There was no answer.

"Atchison to Sarest, come in. Dr. Fernandez, this is Ken Atchison, do you read?" Still no answer.

"Ah, shenk!" said Maiah.

"Let's get back, *now!"*

Encampment One, Southern Continent, Planet MW-537-V, October 25, Y166, 1600 Hours Local Time

The team had a serious problem on their hands. Very serious.

They returned to the camp to find Sarest and Gloria missing. Tricorder scans detected no humanoid life forms. Worse than that, their communications were cut off. Someone had taken a phaser to all three portable computer nodes, severing the links between the satellites in orbit and the ground equipment. Tricorder logs showed the links broken during the time the team was at the pond. Without the portable computers, the tricorders and communicators had insufficient range to link with the satellites, due to the planet's unusual atmospheric conditions. With the portable computer memory reduced to burned metal slag, there was no way to know if Sarest and Gloria had signaled the *Speedwell* before they vanished. There were no obvious signs of a struggle. Worst of all, the shuttlecraft had been crippled: the same phaser used on the computers had destroyed the shuttle's radio and badly damaged the main system controls.

Isabe thought he might be able to make makeshift repairs on the shuttle, but it would take some time. Michiko and Elur did a scan of the camp, but found nothing missing. In fact, Sarest and Gloria had left their "getaway" bags, which meant they didn't leave voluntarily, except maybe in a blind panic. Atchison decided to abandon the main part of the camp and consolidate around the shuttlecraft as a sort of fortress, keeping everyone together while Isabe made his repair attempt. They gathered weapons, rations, water, and medical supplies. While Isabe worked, the rest of the team considered the situation.

"I've combed through Ecirp's logs," began Maiah. "Couldn't find anything unusual. The only thing I noticed was a marked drop in the level of detail, starting about a month ago."

"Maybe he was just getting bored," suggested Michiko disinterestedly. Atchison was worried about her; she was torn up by Gloria's disappearance, though she was trying as hard as possible to cover it up and perform her job. Even exhibiting this level of stress wasn't like her, though.

"Possibly. Perhaps there was something wrong," he suggested. "Any ideas, Doctor?"

Dr. Elur shook his head. "I've gone over the readings from his physical again. Aside from a slight fungal infection on his left foot, he was perfectly healthy."

"Fungal infection? What about that?"

"Local fungus-like microorganism, he may have picked it up from swimming. It was resistant to the antifungal cream he had with him, but I gave him a good dose of oral xenofungazole which should have cleared it up in a day or two. My tests indicated the organism was susceptible to that drug."

Atchison considered this. "I remember reading once about a fungal thing . . . it was years ago . . ."

"I remember," said Maiah, "about 15 years ago, a planet toward the galactic core. Remember, Elur? Star Fleet landing party from one of the survey cruisers caught a fungus, ate into their brains, turned them violent."

"Yes, I recall the case," said the Andorian. "But there is no evidence of anything like that here. Ecirp had the fungus for several weeks, with no indication of any serious problems, aside from the itch. I can't imagine it could have killed him, and we should have found his body if it did. It also doesn't explain the disappearance of Sarest and Gloria."

"True. But go over the readings from his physical again, just to be sure."

"Of course."

"Any *other* ideas?"

Maiah shook her head nearly imperceptibly. Michiko looked lost in thought. Ken tried to engage her. "Michiko?"

"You served in Star Fleet as long as I did. You know it could be anything . . . an energy creature, a disease, a parasite, some shape-shifting native predator, Klingons, Orions."

"It could simply be that Ecirp went crazy," said Maiah. "Remember, whatever happened to Sarest and Gloria didn't trigger the camp perimeter alarm. A creature of some sort probably would have. If it's Ecirp, and he has a sensor masking device, he could remain hidden from the alarm and simple tricorder scans."

"That type of equipment is illegal for civilians, Maiah," said Ken.

"Which doesn't mean he doesn't have one. They're sold on the black market. Hell, Ecirp could be working for the Orions for all we know."

"So could Sarest," said Elur.

"What?"

"We don't know him well at all, and he's very quiet, even for a Vulcan."

"That's ridiculous," said Ken. "I can't believe you'd even suggest that." Ken was shocked; it wasn't at all like Elur to throw out such an accusation. But for a split-second, he shared Elur's thought. Sarest *was* awfully quiet, and Ken hadn't liked the way he'd been put on the team at the last minute. Someone had shot up the equipment with a phaser . . . could that have been Sarest? Or Ecirp? Or any of them under the control of some sort of creature?

Everyone went silent. *Why are we thinking this way?* Ken thought to himself. *We're trained to deal with stress.*

"I'm almost ready to give it a try," said Isabe, "But I need some help here, Ken."

Atchison went over to the shuttle's main controls, where Isabe had been making repairs. "What do you need?"

"I've cannibalized two tricorders and salvaged as many components as I could from the burned-out computers. The radio is gone but I've been able to jury-rig the engineering computer, at least I think so. We can at least get some power going."

"Will we be able to lift off?"

"Probably, but I'll want to run some diagnostics first. I need you at the controls here. Some of the automatic functions might not be working and it might take both of us to keep this thing stable. Hold on a second; let me get this last trans-stator in place. There. All right, we're ready."

"Everyone, we're going to see if we can get the shuttle operating," said Ken. "Take your positions please." The team sat down in their respective seats.

"I will start up the main controls," said Isabe. "Ken, monitor the power flow indicator. If it spikes, shut it down. I don't want to risk burning the system out."

"Ready."

"Activating." Isabe punched the start-up switch for the main power bus. Several indicators flickered briefly, then the panels came to life.

"Any big spikes?"

"No. How does it look?"

Isabe scanned the control panel, gathering information. "Communications definitely down. Helm controls look OK. Life support is good for a week. External sensors gone. Engineering systems look all right, but I'm setting up a diagnostic to make sure. Navigational computer . . . damn, nothing there."

"So we have engine power and can steer, but we won't be able to set a course?"

"We can dead-reckon at sublight I suppose."

"Combat systems?"

"We have the structural integrity field, but no fire control for the phaser."

"How long to complete the engine diagnostic?"

"Five minutes."

There was a horrific screaming sound from outside, like a cross between the roar of a Terran grizzly bear and the howl of a Vulcan le-matya. Atchison bolted out of his seat to the shuttle's hatch, where Maiah and Elur were already peering out.

"See anything?"

"Negative!"

"Nothing on the tricorder scan," said Michiko.

Isabe was looking out the front shuttle window. "I can't see anything here!"

The screeching sound grew louder. A decision had to be made. Go take a closer look, phasers at the ready? They could solve this mystery once and for all, discover what happened to their three compatriots, hopefully rescue them . . . or perhaps share their fate. They could take the shuttle up into the atmosphere, save themselves temporarily and get an aerial look at whatever was going on. Or they could get up into orbit completely and think through the situation. The screech grew even louder. Ken decided.

"Maiah, shut the hatch, Rema, fire up the engines."

"The diagnostic isn't . . ."

"Screw the diagnostic; get us off the ground, now! Everyone buckle in!"

At the pilot's seat, Isabe punched buttons and the shuttle's engines fired up. The shuttle lifted slowly then jerked to starboard and downward slightly. Isabe compensated but was having trouble maintaining a steady course. Ken buckled himself into the shuttle's systems operations seat. Half the panel indicators were out. From what he could tell, the engines were operating normally on a mechanical basis, but the systems that controlled the automatic functions were only partially functional.

"You steer; I'll handle the engines," said Isabe.

"Right."

Ken kept the shuttle on a steady upward course, then stabilized at 1,000 feet. He tried to do a circular course over the camp area, but the steering was sluggish. The other team members were peering out the hatch window, scanning visually.

"Can anyone see anything?"

"Negative, just the camp," commented Maiah.

"Great, an invisible monster!" said Michiko.

"We don't know that there is a monster!" said Elur.

"You heard it! We all did! It got the others, you know it." Michiko was dangerously close to panic, while Elur was unusually agitated for a man normally so calm. What was happening?

"Everyone, quiet!" Ken interrupted. "We don't have any idea what's going on. Rema, any reason we can't make orbit?"

"I don't think so. It will take two of us to handle the controls but everything seems all right."

"I have an idea. Get us into orbit, then track down one of the communications satellites. Get us within communicator range and we'll get a signal to the *Speedwell.* This is beyond our ability to deal with right now."

"All right, gaining altitude and speed, will achieve orbital velocity in 30 seconds."

"Can we find the satellites?" asked Maiah, "We don't have sensors."

"Once we are clear of the atmosphere," said Ken, "We should be able to home in on one with the tricorders and communicators. There's one in geosynchronous orbit over the main camp, shouldn't be too hard to find."

The shuttle lifted into orbit, the purplish-blue atmosphere of the planet gradually fading to darkness.

"Orbit achieved. We're stable."

"Any troubles with the engines?"

"No, looks good. But without sensors we can't navigate at warp."

"Start scanning with tricorders, everyone. See if you can find the satellite."

It didn't take long. "Found it," said Maiah, "Bearing 124 degrees mark nine, from current location, distance 87 klicks."

"Bring us to within 50 klicks, Isabe. Michiko, see if you can get a comm signal."

She began fiddling with her communicator.

"Nothing."

"What? That's not possible; we're already close enough."

"I can't get through, either," said Elur.

What else can go wrong, thought Atchison.

"Is it static or dead air?"

"Static . . . I think we're being jammed."

The shuttle lurched violently, throwing everyone not strapped in to the floor.

"What the . . . " Ken scrambled back into his chair. "Rema, did you . . ."

"Tractor beam, something's got us . . ."

Through the front window, Ken saw the culprit: they were being dragged into the shuttle bay of a Free Trader, a Free Trader but definitely not the *Speedwell*. Or perhaps a Free Traitor . . .

"You might have been right about the Orions, Maiah."

Isabe had revved up the engine power in a futile attempt to escape the tractor beam. The shuttle shook. Ken put his hand on the Cygnan's shoulder. "It's no use, Rema. Shut her down." His friend nodded with resignation and powered the engines down.

Ken turned to his team. "We don't know what's going on here, and we won't be able to shoot our way out, so let's just all stay calm and try to deal with whoever this is rationally."

"What would Orions want with this planet, or with us?" asked Michiko. "There are a million planets out there with resources like this one. It makes no sense."

"We'll find out soon enough."

The shuttle settled into the bay of the larger ship.

Captain's Cabin, Free Traitor *Penzance XXIII*

The Orion Captain offered Ken a refill on his recfe.

"So you see, Doctor, you put me in quite the dilemma. We were hoping to scare you off the planet with the disappearance of a few of your personnel and the apparent existence of an invisible screaming 'monster.' Alas, the incompetence of my subordinates has rendered that plan 'moot,' as you say. One crewman exceeded his orders and caused too much damage to your shuttlecraft. The crewman responsible has been . . . disciplined. We had intended to leave you a means of easy escape."

"So my three missing people are all right, then."

"Yes, they are here on board, safe and sound."

"Might I see them?"

"Not yet. You will be reunited at the right time."

"So what exactly was the plan?"

"As I said Doctor, to scare you off the planet. With your communications cut off, we were hoping you would leave orbit and warp out, enabling us to finish our task before you returned with help. But once I received the report of my landing party, I realized that you would be unable to leave and that we would have to take all of you into custody. After consulting with my clients, we've come up with a new plan, perhaps one we should have considered in the beginning. Indeed, this new plan is likely to be far more profitable for both myself and my clients than our original scheme. The original concept would have gotten us just a few additional weeks of data, perhaps just days. Now we will have months!"

"I'm afraid I don't understand this at all, Captain. What is so valuable about this planet that you needed to go through all of this trouble? Why not just kill us? Why all the charades? If we had left the planet as you expected, we would certainly have returned to find my missing friends, with the *Speedwell* or even Star Fleet or police backup."

The Orion sighed. "It is complicated, Doctor. Several different contracts are involved and certain clients have special needs. And, to be frank, I have never been especially comfortable with . . . murder." He smiled coldly. "Oh, sometimes such things are necessary in this business. But it is not my main focus. I prefer to obtain profit through subtler means."

"You can't hold us forever. The University is going to be expecting progress reports. If we stay silent for too long, they will send a ship out to investigate. And the *Speedwell* will return in six months anyhow."

"Doctor, with the proper . . . persuasion . . . we will convince you to file 'reports' on schedule." The Orion's comment was tinted with menace. "As for the return of the *Speedwell,* your tasks for us will be complete by the time she returns."

Ken took a sip of recfe and swallowed hard. At least the recfe was good quality.

The Captain softened a bit. "Doctor, I realize it will be impossible for you to trust me. And I don't expect trust, nor do I expect you to believe a word of what I'm about to say. But I tell you, if you do what we ask of you for the next six months, conduct the research we ask, study the things we

ask you to study, file the reports we ask you to file, at the end of the period it will be as if nothing unusual had happened at all. The *Speedwell* will return, and you and your team will be on the planet, just as they expect."

"What is it we are supposed to study?"

"You may have already noticed it to some extent, Doctor. Tree pollen on this planet has unusual biochemical properties, acting as a stimulant for certain areas of the central nervous system of most humanoids. Rigellians are immune, but other species are vulnerable to these effects, to a greater or lesser extent. My clients are interested in studying this pollen in detail, and perhaps enhancing the effect."

"'Studying it,' eh?" said Ken. "Trying to turn it into a new narcotic?"

The Orion laughed. "Oh, nothing so mundane as a simple pleasure drug, Doctor. But we can discuss the details later once you begin your research."

"And I'm supposed to believe that after six months you'll just leave us there, on the planet, ready to tell the authorities the whole story?"

"Yes, Doctor. That is *exactly* what I want you to believe." The Orion smiled broadly, then tapped his intercom.

"Take the good doctor back to his cell."

Two guards, one Human, one Orion, entered the cabin, phasers drawn. Atchison rose, considered saying something defiant, then realized that any such comment was both pointless and likely to antagonize the pirates. He nodded meekly, then left in custody of the guards.

The Orion Captain took the last sip of recfe from his own mug, then sat back to consider the state of affairs. Despite the botched attempt to scare the scientists away, quick thinking on his part had saved the situation. His clients were extremely pleased with his solution. It promised six additional months of unfettered research into the unusual biochemistry of the life on this world. What his clients wanted this research for did not concern him, but they were paying handsomely for it. The data would have to be checked, of course, to make sure the scientists were performing valid research and not faking or contaminating their results. His clients seemed confident that their own experts would detect any flaws.

Persuasion could be brought to bear, if necessary, given the emotional ties obviously present in the group, although he would hold this option in reserve as a last resort. He was undecided about the eventual disposition of the scientists; perhaps his clients would be interested in acquiring their services permanently, either voluntarily or otherwise.

The newest addition to his crew was an intriguing case. The Captain didn't trust the new addition just yet. In fact, this lack of trust had been part of the reason they rushed the operation so quickly after the *Speedwell* left, not wanting to give him time to change his mind. But if the new man worked out as well as the captain hoped, he would definitely be of great value in the future, both on this mission and on others.

Someone hit the door chime.

"Enter."

"Ah, yes. Come in, Doctor." The Captain smiled. "You will begin your new duties tomorrow, supervising your colleagues. As we agreed last month, your contract includes a lifetime supply of premium Gahannaese recfe." He poured a new cup from the carafe. "Try it!"

Ecirp took a long sip and smiled.

Notes for GMs

In a gaming setting, this story could evolve and resolve in several different ways.

How much is the team willing to cooperate with the Orions? Will they make an escape attempt? Is Ecirp really a traitor or is he just playing the Orions along? Are the Orions really going to leave the team on the planet when the research is finished or will they sell them into slavery or simply kill them? Who are the clients the Orions are working for and what do they want the tree pollen for? Perhaps the scientists won't be conducting research, but will instead be guinea pigs? Will the pollen impact the different species in the group in different ways? Will the *Speedwell* or another ship return to the planet ahead of schedule?

The villain, of course, doesn't have to be the Orions. The disappearing Ecirp could have been eaten by a tentacled beastie living in the muck at the bottom of the pond. Perhaps he and the missing team members fell victim to a disincarnate energy being, maybe even a benign-but-misunderstood one in typical tradition of the genre. Ecirp could have gone crazy from the fungal infection, an insect bite, or the pollen in the air. Sarest could be a traitor, rather than Ecirp, or there could be no traitor at all.

With an entire galaxy of planets to choose from, the limits are only those of your imagination.

HISTORY AND CULTURE

THE FEDERATION IS MORE THAN ONE PLANET

The political and economic "empire" that styles itself as the United Federation of Planets is more than the sum of its many constituent parts.

There are over a thousand planets with a significant population (over 10,000), and at least 50 have native populations (species which evolved there, or at least were transplanted there in the dim past and can be considered indigenous at the present time), but the *planets* are only a part of the concept that is the UFP.

This concept also includes the people (of various species), numerous military organizations and forces, a constitution and legal system, a powerful economic system, and a trans-planetary system of knowledge and popular culture.

The cultures of each planet (and each region of each planet) have never synthesized into one united culture, but all of them hold and respect core elements: freedom of expression, of opportunity, of mobility; freedom from fear, from want, and from oppression. There is a joint expectation to receive (and a joint duty to provide) protection from domestic tyranny, foreign aggression, and criminal exploitation. There is a unified belief in economic expansion through free trade and technological development, and a drive to gather up as many key resources and markets as possible. Unique among the known empires, there is a respect for the opportunity of planets which have yet to reach starfaring status to develop naturally without interference – the vaunted Prime Directive for which the game is named.

The people of the Federation jealously guard the right to the self-government of their respective planets, but are comfortable in the knowledge that should the government they elected for themselves prove corrupt, incompetent, or tyranical, the Federation will (reluctantly and only temporarily) intervene to put things back on the right path.

The people of the Federation admire and respect their military forces, but keep those forces rigorously controlled by a civilian government. Every member of Star Fleet swears a sacred oath to support and defend the Charter of the Federation, and the military will not tolerate those among its ranks who – even for a moment – would contemplate the intervention by the military into civilian affairs. Except in rare and short-lived emergency situations (usually natural disasters or imminent military threat), no civilian takes orders from the military. Even in wartime, the military *asks* the civilians for what it needs, rather than demanding it, and if the military must order civilians around during an emergency, it is for the protection of those civilians, not for the benefit of the military.

"The business of the Federation is business," someone said once, and every citizen has the right to work in any field where he can support himself, including the right to start his own business, and the right to fail. Every citizen has the duty to take responsiblity for his failures and the right to take credit for his success. To protect successes and enforce responsibility, a complex system of laws, ordinances, and regulations guide and govern the economy.

Every benefit of citizenship comes with an obligation. Everyone gets free medical care, but each adult must earn that right by supporting himself and paying his fair share of taxes. Everyone has a right to a basic education and has the opportunity to earn an advanced education with which to better himself (through scholarship grants or student loans). Anyone who is out of work receives government-paid benefits, but this comes along with the obligation to obtain gainful employment at the earliest opportunity. To that end, those unemployed without marketable skills are given the opportunity to learn new skills that are in demand by an ever-changing economy.

Government at every level of the Federation operates not by forcing people to move or change jobs for the benefit of the government, but by striving to provide opportunities and making those opportunities worth pursuing. No citizen is forced to move to another planet, but civilized planets start and support colonies on other worlds and make these exciting and worthwhile places for their citizens to consider, not a dumping ground for surplus warm bodies.

If the Federation consists of a heterogeneous collection of planets with a consistent set of beliefs and rights, it has three homogenous components: Star Fleet (and the Star Fleet Marines), the Civil Service (those who work for the Federation itself rather than one of the planetary or regional governments), and the Cosmopolitans (a small but growing class of "Citizens of the Federation") who do not limit their concept of "home" to a single world, but to the Federation at large. Star Fleet was forged from the warrior classes of a dozen worlds, but has grown into a unified whole, people who consider themselves "star fleet" (without the capital letters) rather than members of their species. Likewise, the "civil service" consider themselves "federation" (with a small "f") as do the Cosmopolitans. These people feel comfortably at home on any world of the greater political whole.

The Federation was chartered in one day but was not built in one day. It evolved over a century (and continues to evolve) from its many elements into the ultimate expression of what a free society can achieve.

FEDERATION POLITICS

The Federation Charter

The structure of the Federation government is outlined in the Federation Charter, effectively the Federation Constitution. This document outlines the basic rights, laws, and structure of the overall government, while respecting the rights of the original planetary governments.

Basic principles included in the Charter include:

- the sovereign equality of all member planets.
- the basic rights of all citizens.
- collective effort on matters of overall concern, including scientific exchange, fair trade, mutual defense, and exploration.
- internal disputes within the Federation are always to be settled by peaceful means, through diplomacy, the courts, and if necessary by the government.
- wherever and whenever possible, disputes with outside cultures and agencies are to be settled by peaceful means.

THE CHARTER CONVENTION

As Earth developed relations with Vulcan, Alpha Centauri, Andor, and Rigel following First Contact, it was immediately recognized that some sort of alliance or confederation would be mutually beneficial for all the species involved. The first meeting of the Conference on Interstellar Organization convened on November 2, Y1, in the city of San Francisco on Earth. Representatives of Earth, Vulcan, Andor, and Rigel were present. Alpha Centauri was not represented at the first meeting, but was invited to send representatives in the spring of Y2.

As the universal translator had not yet been developed, linguistic experts were brought in from all the worlds represented at the conference to form the core of the Interpretation and Translation Corps. (Many of these were merchants who had traveled space for years and had learned languages and cultures on their own. The results were mixed.) Ambassadors strove to overcome the inevitable misunderstandings and mutual suspicions between the newly met species, while linguists worked hard to iron out the language and cultural barriers. The Vulcans, even at this early point in Federation history, were the predominant agents in helping the various parties overcome their concerns. However, each species had something important and unique to contribute. The Humans, for example, helped bridge the gap between the Vulcans and Andorians, who had come close to war in years past. It should be pointed out that all of the species made extreme efforts to be accommodating. Drawing upon the best aspects of each of their cultural frameworks, the Conference succeeded in drafting a truly multi-cultural charter.

The First Charter of the United Federation of Planets was signed in Y4. According to the Charter, the primary objective of the Federation is "The Maintenance of Interstellar Peace and Security." Further, the organization was pledged to the "Development of friendly, equal relations among the member worlds, based on the principles of the Universal Equanimity of all Sentients, and the right of self-determination for all peoples, to the achievement of mutual interstellar cooperation in the resolution of social, cultural, political, and economic concerns, and to serve as the center for harmonizing the actions of member species in the attainment of these common ends."

AMENDING THE CHARTER

The Charter can be amended by a two-thirds vote of the Federation General Assembly, followed by a two-thirds vote of the Federation Council.

NEW WORLDS

New planets that wish to join the Federation present a petition. In some cases, the General Assembly will invite a promising planet to submit such a petition. If the petition is accepted by a majority vote of the Assembly, the planet becomes a Probationary Member. After a minimum three-year waiting period, the planet may petition for status as a Prospective Member, which also requires approval by majority vote of the Assembly. The next step is Associate Member status, which requires a two-thirds vote in the Assembly for approval. Full Membership is granted only by three-quarters vote of the Assembly and a unanimous vote of the Federation Council. See the chapter on colonization for more detailed information.

ELECTIONS AND POLITICAL PARTIES

The Federation Charter calls for elections for the General Assembly and Council to be held every six years, or sooner if the Assembly passes a vote of no-confidence in the sitting government, or if no party is able to form a majority. As in most parliamentary systems, voters vote by party list, rather than for a specific candidate. There are four main political parties in the Federation, plus numerous smaller parties.

The Federalist Party

The more "conservative" of the two biggest parties, the Federalists tend to take a hawkish stand on military and foreign policy issues and support higher levels of military spending, particularly an expanded Star Fleet. This is based on their reading of history that "ill-guarded wealth is a temptation to plunder" as stated in the party platform of Y168. For example, a Federalist government may look at the case of Munich in Earth history, where appeasing an aggressor backfired and resulted in war, drawing the conclusion that "peace through strength" is the best policy. (Their critics charge that this simply means spending a lot of money on the military that could be better spent elsewhere.) In domestic policy they tend to be concerned with keeping taxation as low as possible, and to avoid rapid expansion of social programs, although they do not challenge the existence of the social safety net itself. The Federalists are closely tied with industrial consortiums and military contractors. They tend to favor a "looser" interpretation of the Prime Directive. The Federalists usually form a coalition with the Conservative Party during their peri-

ods of governance. The Federalists are particularly strong on Mars, Alpha Centauri, and Cygnus.

The Union Party

The more "liberal" of the two big parties, the Unionists prefer negotiation to the use of force in foreign policy disputes. While as concerned with defending the Federation as anyone else, they tend to favor boosting the National Guard and associated ground forces rather than in expanding Star Fleet. (Their critics charge that they are more interested in spending military money on their home planets as a sort of jobs program than actually defending anything.) Based on their reading of history, particularly Vulcan history, Unionists believe that a Star Fleet which is too large is not only expensive, but a temptation to seek violent solutions to conflicts that can be resolved peacefully. When faced with a crisis, a Unionist leader would be more likely to look at the Cuban Missile Crisis, where a devastating war was avoided through negotiation, as an example to follow. The Unionists tend to support higher levels of domestic spending and taxation than the Federalists. They are closely tied with the service and high-tech, but non-military, industries. The Unionists are strongest on Vulcan, Rigel, and Arcturia. They usually form a coalition with the Progress Party when in power, and tend to favor a "stricter" interpretation of the Prime Directive.

The Conservative Party

The Conservative Party has pockets of strength on Mars, Alpha Centauri, Andor, and parts of Earth, but has virtually no presence on Vulcan, Arcturia, and Rigel. Often cooperating with the Federalists but even more to the right on the spectrum, the Conservatives are the most hawkish of the four major parties. They are also the only one of the four major parties which directly challenges the size and expense of the Federation's social sector. Conservative Party politicians and voters tend to be more "ideologically pure" than their frequent Federalist allies.

The Progress Party

The Progress Party's strength is concentrated on Vulcan, Arcturia, Rigel, and parts of Earth, but has very little strength on Alpha Centauri, Andor, and Tellar. The most "dovish" and furthest left of the four major parties, the Progress Party is concerned mostly with the maintenance of strong social programs, and the establishment of interstellar peace. Progress Party politicians and voters tend to be more "ideologically pure" than their frequent Unionist allies.

Smaller Parties

There are usually about a half-dozen smaller parties which pick up enough votes to have a few seats in the Assembly. These parties change over time, are sometimes absorbed into the larger parties or simply disappear, and are often closely tied with the specific concerns of member planets. When the Federation was drawn into the General War in Y171, small parties with seats in the Assembly included the Collective Rights Party (mainly based on Andor), the Peace and Bread League (popular on Rigel), and the Justice Party (based on Earth and Mars) on the left end of the political spectrum, with the Originalists (mainly based on Earth, Mars, and Alpha Centauri), the Independence Party (popular on Andor), and the Freedom Party (Antares and Tellar) on the right. The Orion Pride Party has significant strength within the Orion Enclave. The OPP is non-ideological and focuses mainly on maintaining Orion interests. The Fundamentalist Faith Party tends to support political policies based on their understanding of "moral law" regardless of how impractical these policies may be. As this party includes many faiths, they do not always all agree on any given point.

It should be noted that not every politician or member of a party thinks the same about every issue, especially among the Federalists and Unionists. Generally speaking, the larger the party, the less monolithic and ideological it is; both the Federalists and Unionists are in some ways more akin to political coalitions than ideological parties, no matter what their opponents may say in election season. The average Federalist politician probably has more in common with his fellow Unionist Assembly member than he does with an Originalist or Freedom League member. Most politicians in the major parties are pragmatists, rather than ideologues, even if they paint cartoonish caricatures of their opponents on trivideo campaign commercials.

Federation Elections

Elections for the Federation Assembly must be held within six standard years of the last election, but can be called sooner if the Assembly votes no-confidence in the current government, or if no party is able to establish or maintain a majority government in coalition with smaller parties, or if the ruling government finds some reason to call elections earlier. After the election results are certified, the sitting President (who is head of state but has little actual political power beyond symbolism) asks the party with the most seats in the new Assembly to form a new government. (In theory, the President could ask any party to form a government, but as the Assembly has to vote to confirm each cabinet minister, there is little point in asking a party unable to gain a majority.) If a party has an outright majority (which is rare), it can form the new government, selecting the Council and Chairman. (The Chairman then names a cabinet, which comprises "the government" or "the administration.") Most of the time, even the party with the most votes falls shorts of an outright majority in the Assembly, and must form a coalition with one or more smaller parties to make up a majority.

In Y110, the Federation Charter was amended to ensure that no one individual could be Council Chairman for more than 12 years in his lifetime.

The President is elected by the Assembly every 12 years. There is no term limit, although no one has served as president for longer than 15 years. As the ceremonial head of state, this is considered a "non-partisan" post and is usually occupied by an elder statesman or public figure acceptable to all major parties. Federation presidents have included famous explorers and starship captains, diplo-

mats, scientists, and former Council chairmen. There is a strong tradition, developed over the last 100 years, for the President to be from one of the less powerful planets, although this is not ensconced in law.

The first election for the Federation General Assembly and Council occurred in Y8, four years after the ratification of the Federation Charter.

A BRIEF POLITICAL HISTORY

A full documenting of the political history of the Federation would require a multi-volume book series and would take years (if not decades) to research and write. The following is a general overview, structured around elections and major events.

Chairman Li Zhaoxing (Union Party), Y8-Y20: The first Chairman of the Federation, Li Zhaoxing was a native of Hong Kong in China and had served as Earth's ambassador to Rigel after contact with that species. Deeply involved in the drafting of the Federation Charter, Li Zhaoxing provided stable and intelligent leadership as the Federation found its footing and was easily reelected in Y14. He retired from the chairmanship before the Y20 elections, and was then elected President of the Federation by the Assembly.

Chairman Solak (Union Party) Y20-Y24: Formerly the Vulcan ambassador to the Federation, Solak continued the peaceful expansion and diplomacy policies of the Union Party as the Federation grew in the early years. He was primarily responsible for the establishment of strong trade relations with the Orions following contact with that species in Y21. Solak (who was 230 years old) resigned for health reasons in Y24, turning the chairmanship over to Thelam of Andor.

Chairman Thelam (Union Party) Y24-Y26: An Andorian industrialist who was previously Secretary of Industry under Solak, Thelam replaced Solak but served as Chairman for only two years before the Union Party narrowly lost the Y26 elections over economic concerns. The integration of the various planetary economies had proved more difficult than anticipated, causing recessions on several worlds and giving the Federalist/Conservative coalition their first electoral win. Thelam retired to Andor, where he returned to his previous position as head of the largest industrial tyk.

Chairman Victor Paul Richardson (Federalist Party) Y26-Y38: Born in San Antonio, Richardson had previously served as Governor of Texas, President of the United States, and President of the United Americas. Richardson led the Federalist/Conservative coalition to a narrow victory in Y26 and then a landslide victory in Y32. He boosted Federation military spending and attempted to improve coordination between the various national fleets, but found this difficult to get through the Council and Assembly. Nevertheless, his preparedness program was a major reason that the Federation was able to withstand the Romulan onslaught when war broke out in Y40. He retired from politics after his second term, writing books about politics and history, and becoming president of Texas Tech University.

Chairman Karl Schmidt (Federalist Party), Y38-Y42: A human from Stuttgart, Germany, Schmidt was a trained economist and former Prime Minister of United Earth. A protégé of Richardson, Schmidt faced a very difficult task in trying to coordinate the political and military efforts of the various Federation member worlds to face the Romulan attack. In Y42, he was forced to resign after it was revealed that he had given tacit support to a secret United Earth initiative to bring Tellar into the Federation without the knowledge of the rest of the Council. Although a vote of no-confidence narrowly failed in the Assembly, Schmidt resigned to end the political crisis. He is regarded by modern historians as something of a premature visionary in the field of foreign policy, though his domestic political policies are less well-regarded.

Chairman Sissah-Al (Federalist Party) Y42-Y46: An Alpha-Centauran with wide-ranging political experience, Sissah-Al was Schmidt's Vice Chairman and took over his position following Schmidt's resignation. She immediately brought representatives of the Union Party into the government, adopting a concept of "political unity" in the face of war. This helped ease political tensions left over from the Schmidt administration, and most disagreements were tabled until the end of hostilities. Sissah-Al gave strong backing for the Federation/Orion treaty in Y45 that brought the Orion Enclave into the Federation and turned the tide against the Romulans. In the long run, the treaty was fundamentally a bad deal for the Federation, as the Orions insisted on a variety of economic concessions vis-à-vis the other member planets, plus language that enabled the Enclave to leave the Federation under certain conditions. But in the short run, Orion aid was the critical factor that enabled the Federation to win the war. Although the Federalists had retained power in the wartime election of Y44, Sissah-Al called for an early election in Y46 after the war was over, hoping to use the victory to propel the Federalist Party into another six years of governance. This backfired.

Chairman Moerv Kannal (Union Party) Y46-Y58: A Rigellian Primacy Father, Kannal led the Unionist/Progress coalition to unexpected electoral victory in Y46 by focusing the campaign on complaints of war profiteering and corruption by Federalist appointees in the Federation bureaucracy. A brilliant politician able to reach across both sides of the aisle, he was reelected by a massive margin in Y52 thanks to a booming economy. Kannal's government is generally viewed today as a period of peace, progress, and prosperity. A great deal of money was poured into scientific research in this period, resulting in the development of tactical warp drives and transporters. There was also massive improvement in consumer goods technology, raising the standard of living. Many historians regard him as the most successful peacetime chairman in history, and he became a long-standing political hero for Unionists. During his administration, he started the Social Contract programs which later proved to be too expensive and had to be modified in a series of heated political debates. He returned to Rigel and rejoined the Primacy Council following his chairmanship.

Chairman Francois Hortefeux (Federalist Party) Y59-Y65: Former President of Mars, Hortefeux took office following the narrow electoral victory of the Federalists in Y59, as the party was able to take advantage of the retirement of Kannal and a slowing economy to call for change. Hortefeux made the first serious attempt to unify the various national fleets into a "United Star Force" but was unable to overcome political resistance to the idea, which failed in the Assembly. He died of a heart attack shortly after being reelected by a larger margin in Y65.

Chairman Tankanv (Federalist Party) Y65-Y71: An Andorian military hero from the Romulan War, Vice Chairman Tankanv took office as Chairman following Hortefeux's unexpected death. He expended nearly all of his political capital in getting the Council and Assembly to approve the formation of the United Star Fleet shortly before the elections of Y71, although "training fleets" were maintained by the various member nations. The chairmanships of Hortefeux and Tankanv are regarded with admiration by many historians, despite the political difficulties they faced in centralizing Federation power. Tankanv returned to Andor and became High General of the Andorian National Guard.

Chairman Abdel Naguib Taleb (Union Party) Y71-Y77: A native of Alexandria, Egypt, Taleb took office following the razor-thin electoral victory of the Unionists in Y71. His government confirmed bipartisan support for the formation of the United Star Fleet and expanded the military infrastructure to support its operations. The first of the *Republic*-class starships were laid down during his administration. Although not as popular as the previous Unionist chairman Kannal, Taleb's administration is also regarded as being successful. Due to family concerns, he retired after one term in office.

Chairman T'ipal (Union Party) Y78-Y83: Former head of the Vulcan High Council, T'ipal led the Unionists to victory in the Y78 elections, campaigning on a peace and prosperity platform similar to that of previous Unionists Kannal and Taleb. After a promising start, her administration was rocked in the last two years by a slowing economy, as well as a series of diplomatic blunders involving non-aligned planets, giving rise to a series of reforms in Star Fleet and the Diplomatic Corps. This eventually resulted in the adoption of the Prime Directive in Y86. Tensions with the Kzintis were growing in this period as well. A war was narrowly averted in Y83, but this was only a temporary respite.

Chairman Katrina Isenhavel (Federalist Party) Y84-Y90: Born on Luna, Katrina Isenhavel was the daughter of Julius Isenhavel, a prominent industrialist and philanthropist, and Rachel Isenhavel-Steiner, United Earth's representative on the Federation Council. She spent parts of her childhood on Vulcan, Rigel, and Tellar, and was educated at the best universities on Earth and Andor. Seemingly bred for politics, she first came to prominence as the very youthful Minister of Economics late in the Tankanv administration, then emerged as the key leader of the opposition during the Unionist T'ipal administration She took office after the Federalists handily won the Y84 elections on a platform critiquing the diplomatic bungling and foreign policy failures of T'ipal. In some ways, Isenhavel was the first "modern" chairperson, considering herself a citizen of the Federation rather than Earth. Despite her cosmopolitan views and wide-ranging education, her chairmanship brought mixed results. On the positive side, she negotiated a series of commercial treaties with the Klingon Empire following First Contact with that species in Y85. She felt that the Klingons were natural allies of the Federation, despite the dictatorial nature of their government, due to the threat posed to both powers by the sentient-eating Kzintis. Her internal economic policies also succeeded in boosting domestic growth rates. On the negative side, halting negotiations with the Kzintis (who were well-aware of Isenhavel's attitudes toward them) failed to resolve tensions, and the Hegemony attacked in Y88. Isenhavel had serious problems holding the Federalist coalition together after the Kzintis struck. Forced from the chairmanship after the Y90 elections, she remained in the public eye, founding the Foundation for Interstellar Union, a private organization encouraging greater cooperation between member worlds. Her work in this regard gave her broad popularity with the public, and she was elected Federation President in Y107. Her public support for the controversial Federation Defense Act in Y113 helped Chairman Rustvem pass the legislation through the Assembly.

Chairman Sudheendra Kulkami (Federalist Party) Y90-Y100: A human from Calcutta, India, Kulkami took office following the narrow Federalist victory in the wartime Y90 elections. Although they won the election, a schism in the party between conservative and moderate factions over the course of the First Federation-Kzinti War made it impossible for Chairman Isenhavel to continue in her post. Kulkami, a compromise candidate, was able to bridge the gap and led the war effort to a successful conclusion. As Chairman Sissah-Al did during the Romulan War, Kulkami brought leaders from other parties into the cabinet during the war. After the war ended in Y92, Kulkami did not repeat Sissah-Al's error of calling for immediate elections and waited until the next constitutionally mandated date in Y96. The Federalists won these elections, but did not obtain an outright majority and were forced to rely heavily on the support of the Conservatives and smaller right-wing parties to form a government. The coalition collapsed during the severe economic recession of Y100, forcing a new election.

Chairman D'nanan Formin (Union Party) Y100-Y112: The economic downturn of Y100 propelled the Union Party (in coalition with the Progress Party and smaller parties on the left) back into power with Formin, one of the Rigellian Primacy Fathers, promising a return to economic prosperity. One key component of his plan was solving the poorly defined border problem in regards to the Kzintis and Klingons, resulting in the Border Declaration of Y102. Noting the problems of the undefined border, the Council defined the border of the Federation as being 4750 parsecs from the center of the Primary Member Zone, an area known later as simply "the capital" (Earth, Mars, Vulcan, Alpha Centauri, Rigel, Andor). This declaration, which had strong bipartisan support, was announced as a great

peacemaking effort, intended to assure the other powers that the Federation would never expand beyond this point. The limit was defined by the distance from the capital to the Romulan Neutral Zone. It included territory claimed (and in some cases occupied) by both the Kzintis and Klingons, and set the seeds for future conflict with both empires. Tensions between Federation member planets over trade and tariff barriers (especially resentment over certain Orion concessions) nearly brought down Formin's government in Y103 and again in Y105, but he was able to negotiate a new trade pact that boosted the economy in time for the Unionists to be reelected in Y106. His second term was dominated by the outbreak of war with the Klingons in Y110. Star Fleet performed well in this conflict, and the war ended with a status-quo-antebellum arrangement within less than a year, which Formin believed was due to his diplomatic prowess and which his opponents (including some of his allies in the Council) believed was due to internal Klingon politics. By the end of his tenure economic growth had slowed again, thanks to a breakdown in trade agreements between Orion, Andorian, and Tellarite industrial cartels. Member planets were also stalling on the disbandment of the National Fleets

Chairman Rustvem (Federalist Party) Y113-Y119: The Federalist Party was elected in late Y112 on a platform of solving economic problems, and centralizing and strengthening Star Fleet. Chairman Rustvem, an Andorian economist, used momentum from the election to push through the Federation Defense Act, upgrading Star Fleet while also creating the National Guards to act as a reserve and local defense force. This was considered the "sugar" for the "medicine" of military centralization, but despite this concession, there was controversy. Sixteen Orion starships and over 9,000 crewmen mutinied and disappeared, heading to secret Orion colonies in Romulan space and forming the core of the Orion Pirates, thus humiliating the Rustvem government. Although a vote of no-confidence in Y114 failed, the Federalists were blamed for the Orion mutiny and Rustvem lost most of his political capital.

Chairman Sanal (Union Party) Y120-Y130: The Unionists won election handily in Y120, on a platform of using scientific research and colonial exploration as a way to unify the bickering member planets. Chairman Sanal, a well-known Vulcan diplomat who had served as the ambassador to the Federation for several years, successfully negotiated a series of agreements that eased tensions between Andor, Tellar, and Vulcan interests, although some aggressive Earth and Orion corporations remained dissatisfied. In Y125, Sanal pushed through the Exploration and Expansion Act, beginning a massive program of exploration toward the galactic core. The Unionists were reelected in Y126, but cost overruns in the exploration program and the mysterious disappearance of the Aurora Colony in Y130 caused a major political scandal. Despite the resignation of several Council members, the Assembly voted no-confidence in Sanal's government, forcing a new election.

Chairman John Obasanjo (Federalist Party) Y130-Y135: Elected easily after the collapse of Sanal's coalition in late Y130, John Obasanjo was a human from Ibadan, Nigeria. Former president of the United States of Africa and a cabinet minister in the last Federalist government, he cut back the expensive Unionist exploration program and reduced taxes. The last year of his tenure was marked by increasing tensions with the Kzinti Hegemony over planets such as Cygnus and Mantor. In October Y135, a Kzinti cruiser (acting without orders) destroyed the Federation police ship *Behan*, but last-second negotiations prevented the outbreak of war. An exhausted Obasanjo suffered a debilitating stroke in November Y135, but the moderate and conservative wings of the Federalist party were unable to agree on a candidate to replace him as Chairman, forcing an election several months earlier than constitutionally mandated.

Chairman Ignacio Guerrero Juarez (Union Party) Y136-Y147: A human from Monterrey, Mexico, Chairman Guerrero took office after the Unionists barely won the hastily called March Y136 election. He was thrown into crisis almost immediately due to the outbreak of war with the Kzintis in August. The new Kzinti Patriarch, seeking resources from the disputed regions to fund planned future wars with the Klingons and Lyrans, believed that the Federation was weak and politically fractured by democracy and the constant arguments between member planets. But the Kzintis gravely underestimated Federation resolve. The initial offensive, while successful on the surface, failed to knock the Federation out of the war with the first blow, and the superior Federation economy eventually ground the Kzintis down. Like most wartime Federation leaders, Guerrero brought political opponents into his cabinet during the conflict. Guerrero proved to be a very effective war leader, rallying morale and support even after initial reverses along the Kzinti front. The war was brought to a successful conclusion in Y142, formalizing the pre-war border and bringing Cygnus, Mantor, and many

other worlds firmly into the Federation orbit. Guerrero and his government were easily reelected in the euphoria that followed. However, his second term was much less successful. Internal disputes between member planets over (as usual) economic concerns split the moderate and liberal wings of the Unionist party, bogging down the Council and Assembly in infighting and leading to a Federalist resurgence in Y147.

Chairman Rena Manfe (Federalist Party) Y147-Y151: Alpha-Centauran political figure Rena Manfe took over as Chairman following the Federalist victory in the Y147 election. However, the political and economic disputes between member planets that dogged Unionist Guerrero's second term continued for Federalist Manfe, showing that neither party was immune to these stresses. Disagreements between Vulcan, Andor, Tellar, and Orion over admitting new worlds to the Federation were particularly common. When the Conservative Party left the coalition with the Federalists in Y151, Manfe was forced to call new elections.

Chairman Qnorna Kannal (Union Party) Y152-Y164: Granddaughter of popular Chairman Moerv Kannal, Qnorna Kannal led the Unionists to a victory late in Y151 on a platform promising economic revival, a new exploration drive, and a reform of Star Fleet and the rest of the Federation military. Kannal backed a major expansion of the National Guard and planetary defenses, in part to make sure that there were plenty of local government contracts available to satisfy the various member planets. Star Fleet was not expanded in terms of fleet size, but additional money was allocated into technological research to improve the quality of the fleet, and to provide more jobs and reduce bickering among the member planets. This program was successful in reducing economic friction between the various worlds.

Kannal's term was also marked by three brief wars: with the Romulans in Y154, the Klingons in Y156, and the Gorns in Y157. All three wars were resolved through negotiation. Kannal presided over the signing of the Treaty of Pelione that that ended the war with the Romulans and re-established the old border and neutral zone. Formal diplomatic relations were opened and strictly controlled trade began to cross the border for the first time.

The Organian Peace Treaty ended the conflict with the Klingons. Brokered by the powerful (but not omnipotent) Organians, the new treaty allowed for economic development and scientific exploration of uninhabited planets within the neutral zone between the two powers. This was intended to address Klingon accusations that the Federation was trying to "strangle" Klingon trade, while maintaining the Federation's strategic position and enabling both sides to utilize valuable resources in the area. The Organians also agreed to act as neutral arbiters in disputes between the two powers. Alas, in some ways the treaty actually increased tensions, rather than preventing them, as many planets within the neutral zone became focal points for conflict rather than cooperation. The upgrade of border base stations to battle stations (which had begun much earlier) was completed in Y160.

Less controversial was the Treaty of Algoran, which began the process of Gorn/Federation friendship. Here, the Federation apologized for attempting to colonize the territory of the then-unknown Gorns, while the Gorns paid reparations for the destruction of the Federation colony on Cestus III. (That planet was beyond the limits of the Y102 declaration, and its establishment had been hotly debated. The Federalists felt that since no one was there, the limit was not relevant. The Unionists felt that the principle was important, and that there were plenty of worlds inside the declared limit. When it was discovered that there *was* another species in that direction, the Federalists were humiliated.) The Gorns were happy to accept a border based on the Y102 Border Declaration. Trade routes were established, and the two sides began a series of diplomatic and cultural exchanges.

Reelected by a huge margin in Y158, Kannal herself believed that this flurry of diplomacy only postponed a wider war, although she did not make this belief public, as she still hoped to avoid it.

In her second term, she began pushing for greater military spending, but found this difficult to get through the Assembly. An attempt to obtain support from the Organians in a "limited action" against the Klingon threat backfired and increased tensions dramatically with the Empire. The Klingon-Romulan Treaty of Smarba brought the two empires closer to each other, and boxed the Federation in.

Kannal attempted to counter the closer relations between the Romulans and Klingons by opening up the Romulan Empire to the galaxy through détente; she hoped to reduce the Romulan xenophobia, and to pursue closer relations with the Kzintis and Gorns. Kannal also began a new exploration drive toward the galactic core, looking for more resources. (This was highly controversial, as any sustained drive would quickly go beyond the Y102 Border Declaration.) By the end of her second term in Y164, Kannal felt that war was still possible but no longer inevitable, provided that wise leadership remained in power. Kannal was particularly proud of the "measured response" to the Klingon massacre of Federation colonists on Rita's Planet in Y164.

She retired to academia at the end of her tenure, but during the General War she returned to public life and served as the ambassador to the Gorns under the Baranov and Kirnad administrations. She helped convinced the Gorns to join the war in Y174. In Y178, she was assassinated. The culprits were never caught, but Romulan operatives were suspected.

Chairman Randolph C. Buckner (Union Party) Y165-Y173: With Kannal barred by term-limits from remaining as Chairman, she turned the leadership of the Council over to Luna's Randolph C. Buckner following the Unionist victory in the Y165 elections. An experienced figure in the politics of Luna, United Earth, and the Federation, Buckner had served in two previous Unionist cabinets, was a general in the United Earth Defense Organization, and was considered the ideal and obvious candidate to follow up Kannal. Nowadays, the image of Buckner among the general public is very negative, but a closer look at the

historical record reveals a more complex, if still negative, assessment of his tenure.

On the positive side, he solidified friendly relations with the Kzintis and Gorns, following up Kannal's policy of "holding the flanks" of the Federation against burgeoning Klingon and Romulan power.

His military policy was more controversial. Star Fleet wanted to build new classes of ships (carriers, a new class of light cruisers, light dreadnoughts, fast cruisers, and more) while Buckner wanted to restrict the military budget (to spend more on social programs) and focus more of the military budget on National Guard forces (popular with Unionist politicians who increasingly used this as another social program). As a compromise, Buckner supported the modernization of existing Star Fleet ships, adding drone racks and more phasers, and accepted the design and production of a very limited number of new ships, with an equal number of old light cruisers placed into mothballs. (Opposed to spending so much money on new ships, Buckner allowed that program to become law without his signature by refusing to sign or veto it within the Charter-mandated period of 30 days.) The disastrous battle at Adanerg in Y167 showed that Star Fleet was not ready to fight a war, but Buckner (who simply didn't understand that Star Fleet had not conducted training for anything but patrol encounters in a decade) refused requests for funds to hold such training.

Buckner put little political muscle behind the modernization program, bending to domestic economic concerns and limiting the pace of refits and new construction. This program, while helpful, was far less than what Star Fleet wanted or needed, and left the Federation unprepared for the war to come.

Buckner and the Unionists were reelected (narrowly) in the spring of Y171 on a platform of keeping the Federation out of the Second Four Powers War while supporting the Kzintis with massive sales of weapons and supplies on credit. Tensions with the Klingons were very high, but a diplomatic initiative to resolve the crisis collapsed when the Organians, who had served as neutral brokers for 15 years, disappeared. At that point everything fell apart. What was previously a war between the Klingon/Lyran and Hydran/Kzinti power blocks became the General War when the Klingons, sensing Federation weakness, launched a massive invasion.

Buckner had several personality flaws that made him a poor war leader. He was a micromanager, and found it very difficult to delegate responsibility to those who knew more than he did. Outwardly confident, inside he was plagued with self-doubt and guilt. When the invasion began, Buckner panicked and began interfering with military deployments in an attempt to stop the onslaught. His political opponents accused him of using the fleet to shield the worlds of his political allies. Some historians agree with this, while others believe that Buckner was simply incompetent and out of his depth. He ordered a fleet sent to break through to the Hydrans (citing this as "politically important") despite the fact that the Hydrans had already been defeated and were beyond reach of this expedition. This fiasco cost Star Fleet a dozen ships it could not afford to throw away. Even Buckner's respected domestic political skills failed when the Orion government declared neutrality and pulled out of the Federation late in Y171.

The front stiffened in Y172 when the Klingon offensive ran out of its initial stockpile of ships and supplies. However, the "Day of the Eagle" (January 4, Y173) saw the Romulans join with the Klingons and attack the Federation from the rear, opening a new front in the war and driving the Federation to the brink of defeat. Romulan and Klingon ships even raided Federation member planets. By the middle of the year, the situation seemed almost beyond hope.

In July Y173, the GIA presented the despairing Buckner and the Council with an official War Assessment, which estimated that the Federation had only a 22% chance of pushing the invading Coalition forces back to the original border, that the war would take at least 10 years to conclude, and that up to 4 billion civilians and military personnel (on top of the millions already dead) would die in such a conflict. Star Fleet Intelligence disagreed with the GIA assessment, estimating the chance of final victory at about 54% and calling for an expanded effort to win the war, but concurred with the GIA that casualties would be heavy.

Faced with this bleak future, the majority of the Council voted to end the war and accept the Coalition's recently offered peace terms, which amounted to a partial surrender, the loss of huge tracts of Federation territory, an end to support for the Kzintis, and the payment of trillions of credits in tribute to the Klingon and Romulan empires. Vice Chairman Baranov and several others disagreed with this decision and wanted to fight on (or at least hold out for better terms), but were outvoted. Star Fleet was outraged and the Federalist Party called for a vote of no confidence, which was stalled by parliamentary maneuvering. Buckner and several Council and cabinet members were killed when the negotiations at Olsen's Reach collapsed into a melee of starship combat.

Chairman Vasili Mikhailovich Baranov (Union Party) Y173-Y176: Russian industrialist and Council Vice Chairman Vasili Baranov took power following Buckner's death. Born in Vladivostok in Y120, Baranov was a dynamic figure. He had no military experience, but was extremely skilled in economics, politics, and diplomacy, and was a quick study about any topic to which he put his mind.

Baranov faced an immediate crisis in the looming no-confidence vote, which the Unionists were certain to lose. Faced with the choice of defeat or resignation, he masterminded a political compromise, pointing out that a no-confidence vote and hurried new elections in the middle of an invasion would disrupt the Federation government at the worst possible moment. To remain in power, he formed what was effectively a coalition government with the Federalists, naming noted conservative Federalist Andorian politician and jurist Aelastok Kirnad as Vice Chairman, and retired Admiral Kincaid MacKenzie as Defense Minister. (Buckner had forced MacKenzie to retire because he was pushing too hard for construction of new classes of ships.) Baranov brought other Federalists into the government to

replace the Unionists who had been killed at Olsen's Reach. While nothing was said in public, rumor had it that Baranov had reached a deal with Kirnad: the Unionists would run the Federation while the Federalists would run the war.

Over time, Baranov earned the respect of his Star Fleet advisors, showing a deep understanding of the major strategic and operational dilemmas of modern war. He reached a formal alliance with the Kzintis (who had been on the brink of surrender at the time of Olsen's Reach), and his hard bargaining made it clear that the Federation (despite its lack of military successes) was the senior partner. His diplomatic initiative to the Gorns and the appointment of former chairwoman Qnorna Kannal as ambassador succeeded in bringing the Confederation into the war against the Romulans in Y174, creating the Grand Alliance. Although Baranov held office for only three years, he is credited by many historians with saving the Federation, energizing the people and the economy, and providing outstanding leadership in the darkest hour. His critics claimed that he simply got out of the way of Kirnad and MacKenzie.

Not unexpectedly, the Unionists lost the Y176 elections, but few held Baranov responsible.

Chairman Aelastok Kirnad (Federalist Party) Y176-Y186: The Federalists won the Y176 elections handily, forcing Baranov's retirement from the chairmanship. New Chairman Aelastok Kirnad, seeking political unity, appointed Baranov as Minister Without Portfolio, then supported Baranov's election to the post of President in Y178. Baranov served as a symbol of unity and hope for the remainder of the war.

Kirnad himself turned out to be an excellent war leader. Like Baranov, the Andorian politician avoided military micromanagement and concentrated on tending the political and diplomatic side of the war. His first order was to launch Operation Wedge, which separated the Klingons and Romulans and turned the war around. Kirnad won reelection by a large margin in Y182, but at that point wariness began to set in as economic strains and the failure of several Alliance offensives hurt his standing. By the time the Organians reappeared in Y185, the pre-war borders had more or less been re-established, with both sides conducting tedious attrition operations that made any kind of strategic victory impossible.

When Kirnad and the Council accepted the Organian proposal to mediate a ceasefire, a political firestorm exploded. Some conservatives claimed that the millions of dead had been betrayed by the cowardly Kirnad accepting a ceasefire that ended the war with no territorial gains, but most agreed that the Federation had never wanted anything more than status quo antebellum. Some liberals claimed that the warmongering Kirnad administration had dragged the war on for at least three years, and that the ceasefire could have been negotiated much sooner without so much additional loss of life. Faced with the collapse of his position in the Council and Assembly, Kirnad called for early elections.

Chairman Millard M. Torrance (Unionist) Y186-Y187: The Unionists under the leadership of Millard M. Torrance won a very narrow victory in Y186. From the major colony world of Sigma Draconis IV, Torrance was a wily political operator in domestic political matters, but was out of his depth as a leader of a major empire. When the Inter-Stellar Concordium began major operations to "separate" the powers, Torrance attempted to open negotiations with the ISC, which he saw as a natural ally of the Federation due to their political idealism. These negotiations failed dismally. The ISC considered the wartime destruction of the Romulan capital planet Remus a deliberately genocidal act, and was convinced that the Federation was just as irrational and violent as any of the other major powers.

Torrance lasted just over one year in office, forced to resign after an investigation by a major trivideo news program exposed severe corruption in dispersal of government contracts benefiting his supporters. The Progress Party threatened to pull out of coalition with the Unionists and collapse the government if Torrance did not bow out. Torrance resisted at first, until President Baranov himself, in an unusual move, publically pressured him to resign.

Chairman Ises Lerona (Unionist) Y187-Y192: A military hero of the General War, retired Alpha-Centauran National Guard General Ises Lerona (who had never been a member of any party) had been brought into the Unionist government as Vice Chairman by Torrance during his attempt to unify moderate and liberal factions in the party during the Y186 elections. After Torrance resigned, Lerona began a massive anti-corruption campaign, purging the most corrupt Torrance supporters from the party, but also exposing the "history of war profiteering" from supporters of both major parties during the General War. (Later investigation found very few cases of actual profiteering, but the contractors that supplied Star Fleet its ships and weapons did make enormous profits when counted in total credits. The percentage profit was very low, but even a tiny percentage of huge expenditures was an astronomical total.) She appeared on path to reelection in Y192, but the Andromedans began massive attacks on Federation facilities three months before the elections, hurting her standing. (She had publicly asserted that the Andromedans had "promised" not to attack the Federation, but as there had been no contact with the Andromedans, it was unclear if there was any such promise or if this was merely the best guess of the GIA about Andromedan intentions.)

Chairman Kel'Tenar (Federalist) Y192-Y198: Andorian politician Kel'Tenar took the chairmanship after the Federalists coasted to victory in Y192, blaming the Unionists for being unprepared for the Andromedan onslaught. Kel'Tenar proved a relatively effective leader in terms of foreign policy and military matters, managing the Andromedan War with a deft hand, but he was less popular in domestic affairs, seemingly more concerned with supporting large corporations than in helping the average citizen. The Federalists barely won the Y198 election despite military success against the Andromedans, and the party leaders forced Kel'Tenar to retire.

Chairman Deng Mei (Federalist) Y198-Y210: A human from Nanjing, China, Deng Mei had served as Prime Minister of United Earth at the height of the General War and was a unifying figure popular throughout the Federa-

tion. He presided over Operation Unity and the final defeat of the Andromedans. He concentrated on negotiations with the other major powers that heralded both the so-called "Era of Tranquility" and the Trade Wars. Easily reelected in Y204, his second term was marred by domestic political missteps and economic problems that dramatically reduced his popularity.

Chairman Tinian Bock (Federalist) Y210-Y215: A heroic starship captain of the General War who had served as Defense Minister under Deng Mei, Admiral Bock (from the Titan Colony) was not expected to win the elections of Y210, but a scandal in the Unionist Party a month before the vote resulted in his narrow upset victory. Very little is known of his term in office except for reports of political bungling that nearly caused a new war with the Klingons. He was soundly defeated in his bid for a second term by an electorate that apparently believed they had made a mistake in Y210.

Chairman S'nan Varial (Unionist) Y215-?: Cygnus became a Full Member of the Federation in Y208. Just seven years later, noted Cygnan politician S'nan Varial became the first member of his species to become Chairman, following the Unionist victory in the Y215 elections. There is little about him in the historical record; all that is known is that he was very popular, and was reelected in Y221.

Government Agencies

The Federation maintains many agencies and bureaus managing the affairs of the government. Both the President of the UFP and the Chairman of the Council maintain their personal offices in the city of Paris on Earth, while the Council itself and the General Assembly meet and conduct business in the city of San Francisco. The various government bureaucracies will have a main headquarters on one of the Federation core worlds, but also maintain satellite locations on worlds throughout the Federation.

In the early days of the Federation, warp travel was not nearly as safe, convenient, or rapid as it was in later years. As a result, when Earth was selected as the seat of government, many ministries were located there for the sake of efficiency, to be closer to the Assembly, Council, and President. This caused controversy among some of the other members, but the wide dispersal of government contracts among different planets, as well as the establishment of satellite facilities on other member worlds, mollified most opposition.

The bureaucratic flow chart is rather complex. Government is divided into several ministries which provide overarching direction and support for their respective bureaus. Each ministry is headed by a cabinet minister appointed by the Chairman with the approval of the Council. Each bureau has numerous secretaries and under-secretaries who are also appointed by the Chairman and approved by the Council.

The *Black Eagles* Prime Team

MINISTRY OF DEFENSE

The Ministry of Defense provides for civilian control and direction over The United Star Fleet and the National Guards. For more details, see the section on the Federation military.

MINISTRY OF ECONOMICS

This ministry is the largest of the civilian-oriented ministries. It contains many bureaus and sub-bureaus, some of which have overlapping responsibilities which can lead to infighting and duplication of effort. Headquartered in the city of Singapore on Earth, the Ministry of Economics does not "run" the economy as such. Rather, the purpose of the Ministry is to encourage economic growth and to ensure that economic relations between member planets operate as smoothly as possible. Important bureaus within this ministry include:

Bureau of Agricultural Affairs

This bureau is responsible for the development of sustainable agricultural practices on Federation member worlds and colonies. It funds research into new crops and farming techniques, is charged with ensuring the safety of the food supply, and assures distribution of foodstuffs among the various Federation colonies. It is headquartered in Ames, Iowa, on Earth, with a huge agricultural research complex based at Iowa State University. Similar facilities exist in Canada and the Ukraine on Earth, on Alpha Centauri, and on Tellar. The BAA maintains hundreds of agricultural research colonies throughout the Federation, and charters thousands more run by private groups.

Bureau of Data and Statistics

This bureau generates economic statistics, providing reams of non-partisan and objective data for the use of government and private analysts.

Bureau of Industrialization

This important bureau helps ensure that trade between the various planets is conducted on a fair basis, and enforces minimum wage and worker safety regulations. The bureau also provides economic aid and grants for struggling planets, and works hard to help new member worlds integrate their economies and industries into the Federation without undue disruption.

Bureau of Tariffs and Trade

This bureau coordinates trade regulations with non-Federation entities, including independent planets within Federation space as well as the larger outside empires such as the Klingons, Romulans, Kzintis, and Gorns. (There is little if any trade with the Tholians.)

Other Bureaus

Other departments within the Ministry of Economics include the Bureau of Weights and Measures and the Federation Patent Office.

MINISTRY OF FOREIGN RELATIONS

Headquartered in the city of Baltimore on Earth, this ministry is responsible for the implementation of the Federation's foreign policy. There are three main bureaus:

Bureau of Planetary Treaties

The Bureau of Planetary Treaties manages relations between the Federation and independent planets *within* recognized Federation space.

Bureau of External Relations

This bureau manages relations between the Federation and outside empires (Klingons, Kzintis, etc.), as well as independent planets within the neutral zones surrounding Federation territory proper.

Bureau of Embassies, Immigration, and Tourism

This bureau is responsible for the day-to-day operation of embassies and consulates, including the issuance of passports, visas, guest worker permits, and immigration permits. It executes policy but does not determine such policy.

MINISTRY OF INTERNAL RELATIONS

Headquartered in the city of Shak'hal on Vulcan, this ministry works to ensure smooth diplomatic relations between the member planets of the Federation. Its bureaus include:

Bureau of Arbitration

This bureau provides a source of neutral arbitration to help solve disputes between member planets that regular diplomacy has been unable to resolve. As part of Federation membership, planets agree to submit disputes to a panel of mutually agreed neutral arbiters. (If the parties cannot agree on such a panel, the Bureau of Arbitration selects the panel with approval of the Council.) The Bureau of Arbitration maintains several "neutral planetoids" at various locations within the Federation to host discussion conferences and diplomatic initiatives.

Galactic Cultural Exchange Agency

This agency encourages exchanges of culture between the various Federation worlds, providing funding for art exhibits, plays, trivideo programming, documentaries, and literature. While computer technology and subspace radio makes the cultures of a thousand worlds available at the average citizen's fingertips, some forms of art are best appreciated in person. The GCEA provides travel grants to help artists and writers travel from world to world, encouraging the dissemination of information and exchange of ideas between worlds.

MINISTRY OF JUSTICE

Headquartered in the city of Stockholm on Earth, the Ministry of Justice is responsible for the administration of justice and the maintenance of sentient rights within the Federation.

Central Bureau of Penology

The Central Bureau of Penology manages the system of penal colonies, prisons, and reorientation centers designed to rehabilitate those convicted of crimes into becoming productive members of society. Most crimes are minor and are punished by fines or community service. Major crimes merit imprisonment, but prison focuses on education and training (in both ethics and job skills) to avoid the social causes of crime.

All member planets are required to bring their prisons and penal systems into accordance with Bureau of Penology standards in regards to living conditions and rehabilitation opportunities as a condition of Federation membership. In some cases, particularly for violent crimes, criminals convicted by the judicial systems on member worlds are turned over to the Central Bureau of Penology for their rehabilitation.

The Klingons, Romulans, and many other species can't understand why the Federation expends resources helping antisocial individuals be less antisocial, considering that the use of criminals as a source of forced labor, or simply executing them, is a more efficient way to deal with the problem. While the Federation does not regard sentient nature as being truly "perfectable," research has shown that many (though hardly all) of the worst criminals (serial killers, pedophiles, and other predators) suffer from chemical imbalances or structural flaws in the brain. If such imbalances and flaws can be corrected, the Federation reasons, such individuals can still make a positive contribution to society.

Modern (TL12) psychological techniques, therapy, and medications are reasonably successful in helping prevent criminal recidivism, although there is still a small core of "hard cases" who resist all attempts at rehabilitation.

Violent criminals who simply can't be rehabilitated are confined to isolated penal outposts where they can harm no one.

Interstellar Court of Justice

The main judicial department of the Federation, the ICJ establishes the system of Federation law, rules, and regulations that are enforced in all locations directly controlled by the Federation. Individual member worlds operate their own systems of justice, although as a condition of membership in the Federation they must abide by the principles of Sentient Rights laid forth in the Federation Charter. Crimes committed on colonies or facilities directly controlled by the Federation fall under ICJ jurisdiction. Cases of treason, espionage, or crimes committed by citizens of other empires also fall under ICJ jurisdiction.

The ICJ has various levels, beginning at the provincial level and rising to the highest level, the Federation Supreme Court. The 12 judges of the Supreme Court are nominated by the Chairman, but must be approved by a 60% vote of the General Assembly in order to be confirmed. Judges serve a 10-year term. They may be renominated, but by law no judge can serve on the court for longer than 20 years in one lifetime.

MINISTRY OF DEVELOPMENT

Headquartered in the city of Hanvna on Rigel IV, the Ministry of Development is the agency responsible for colonization and finding new resources. It is supposed to cooperate closely with the Ministry of Economics; however, some of their responsibilities overlap, and there is often considerable tension and infighting between the two ministries and their respective bureaus.

Federation Commission for Colonization

The FCC acts as the clearing-house for all planetary survey data submitted to the Federation. This data can come from Star Fleet, UESPA and similar exploration agencies from other member worlds, private corporations, universities, or independent scouts. The FCC then decides which worlds warrant further study and colonization. It is the Commission's job to allocate new systems between the various factions that vie for them, including corporations and business cartels, public or private sector groups seeking a colonial charter, member planets looking for new planets to reduce population pressure, Federation government agencies, and the military, as Star Fleet is often looking for places to build new bases and supply depots. The Commission is charged with distributing such worlds in a fair and equitable manner. The FCC must present a yearly report to the General Assembly. It is expected to accept recommendations from the Assembly, but in general it is free to make its own decisions.

The FCC is very powerful. The selection of the Minister of Development and the FCC Director-General is one of the first things a new Council Chairman does, and the decision is closely scrutinized by the Assembly and the independent press. Complaints about FCC allocation of colony worlds are a common plank in election campaigns.

Bureau of Galactic Resources

According to its charter, this bureau is responsible for the "general development of natural resources within the Federation." Like other Ministry of Development bureaus, the BGR is supposed to cooperate closely with the Ministry of Economics, but there is often a great deal of tension and infighting. The BGR is responsible for the distribution and allocation of mining and resource rights in solar systems not directly controlled or colonized by a member world, through the generation and distribution of Claim Certificates. Such certificates can be sold or transferred with BGR approval.

For example, 23 Librae is a G5V main sequence star about 84 light years from Sol. The system has a system of six planets, but none are habitable or particularly resource-rich. Aside from an automated navigation beacon maintained by the Federation Police, the system was ignored for more than a century after it was initially mapped by the Vulcans in Y10.

However, in Y137 the Prellarian trading ship *Brelarus,* on its way to Earth with a cargo of Prellarian gemstones for the Terran jewelry market, passed near the system and noticed an unusual energy signature emanating from a body in the system's Kuiper Belt. Investigation revealed

that a small Class-Q planetoid within the belt contained large deposits of sigma-positronium that had previously gone unnoticed. The Volan Mining Company of Prelaria (which owned the *Brelarus*) immediately put in a claim with the BGR to exploit the find. The BGR approved the application, granting Volan a claim certificate for the planetoid.

But the discovery encouraged a new look at the system by other entities. Several Terran, Martian, and Orion corporations dispatched ships to study the system in greater depth. Martian Mining and Manufacturing put in claims on several asteroids with significant mineral deposits. However, MMM never actually exploited the asteroids, and the claim certificates were eventually sold to Volan.

Human corporations Weygand-Yulani, Exxon, and Taggart Pan-Galactic vied for control with two large Orion cartels over a Class-D moon of the system's largest gas giant, which was found to have underground (and difficult to detect and exploit) deposits of topaline. Weygand-Yulani eventually won the claim, resulting in a series of lawsuits and complaints that the BGR was biased against the Orion cartels that had also put in claims.

The lawsuits dragged on for years but were eventually settled in WY's favor, confirming the Bureau's original decision. However, the cost of fighting the lawsuits, combined with the high overhead involved in extracting what proved to be just poor-to-medium-grade topaline from the moon, made the operation barely a break-even proposition for WY. With approval from the BGR, the topaline mine was sold off to Volan Mining in Y153, giving the Prellarian company control over all mining rights in the system.

MINISTRY OF EDUCATION, RESEARCH, AND SCIENCE

Headquartered in Gennake Metropolis on Alpha Centauri, this ministry is responsible for encouraging the free dissemination of knowledge and learning throughout the Federation.

Bureau of Education

The Bureau of Education provides funding support for universities and colleges, as well as both public and private research institutions. Curriculum and most funding is controlled at the local level, but the BOE provides a "baseline minimum" of funding to ensure that all Federation citizens receive a good education (through the university level if they want to go that far and maintain academic standards). Universities focus on "hard" degrees (e.g., accounting, engineering, science, business) leaving "soft" degrees (e.g., art appreciation, liberal arts, literature) to regional colleges.

Federation Science Bureau

This bureau provides for the exchange of scientific and technical data to all member species, providing equal technological accessibility for all. The bureau also reviews all new technical proposals from public and private entities, provides grants for promising avenues of research, and provides recommendations to the General Assembly and Federation Council over scientific issues.

MINISTRY OF HEALTH

The Ministry of Health, headquartered on Vulcan, administers the system of hospitals and health clinics throughout Federation space. Physicians in private practice submit their bills directly to the Ministry of Health.

IMPORTANT INDEPENDENT BUREAUS

Some important bureaus are independent of the larger ministries and report directly to the Chairman, Council, and General Assembly.

Federation Emergency Management Agency

FEMA was originally a part of the Ministry of Development. However, in Y136, the outbreak of famine on an important Earth colony caused a major scandal. FEMA was accused of mismanaging the crisis due to too much Development Ministry red tape, which was true. FEMA responded that the agency was underfunded, which was also true. As a result, FEMA was split off from the larger agency and became an independent department with greater funding levels in Y139. FEMA is responsible for coordinating relief efforts and distributing emergency supplies to member worlds or colonies in danger due to natural (or other) disasters. Headquartered in the city of Augel on Rigel IV, FEMA cooperates closely with Star Fleet, the National Guards, and the Federation Police.

Federation Reserve Bank

The Federation's central bank, the FRB keeps the flow of credits moving through the Federation economy, maintaining the electronic accounts through which most business is conducted, supervising and providing lines of credit for banks and private financial institutions, and coordinating the central banks of the various member worlds. The FRB is headquartered in the city of São Paulo on Earth,

operating regional and provincial banks and branches throughout the Federation.

Galactic Intelligence Agency

The GIA provides independent intelligence analysis for the UFP. This includes signals intelligence, historical analysis and study of cultural trends, forecasts for the future, diplomatic assessments, and espionage operations on independent worlds within Federation territory and within other empires. The GIA is forbidden by law to operate spies *on* Federation worlds, or to spy on Federation citizens. Counter-espionage is supposed to be handled by local authorities and the Federation Police. In practice these rules are often difficult to follow, especially in war time, and are often bent or outright ignored. The GIA has a stormy rivalry with Star Fleet Intelligence. GIA Headquarters is located in the city of Berlin on Earth.

FEDERATION ECONOMICS

The histories of many worlds show that free-market capitalism is the best system for the consistent generation of wealth. No system has ever shown that it can generate wealth and economic productivity as well as capitalism. But at the same time, history also shows that the weak and powerless (the sick, the elderly, children) do not do particularly well under a purely capitalist system. The market, while "perfect" in theory, can become distorted in reality. Excessive boom and bust cycles that outstrip the ability of private charity to deal with social problems provoke political backlashes: the excesses of 19th-century Social Darwinist early capitalism on Earth, for example, provoked the reactions of reformist democratic socialism and destructive totalitarian communism.

Most species which adopt a capitalist economic form went through similar development crises, trying to find a balance between the pure free market and a total command economy. The dilemma is this: if the government raises taxes too much, and provides too many social services, it will choke off growth and discourage work and wealth creation. On the other hand, if the government doesn't provide enough social services, and allows the "creative destruction" of capitalism to get too far out of control, it can provoke a backlash among the "losers" in the economy that can result in severe political instability, social unrest, and even revolution. A rising tide may lift all boats, but some of them get swamped when the weather gets stormy, and at times the passengers drown.

The key is to find the "sweet spot" between the market generation of wealth and social provision, enabling those with creativity and drive to thrive and expand wealth, while ensuring that the weak, the helpless, and the innocent are not left behind. High technology and the resources of thousands of planets have enabled the Federation to find this "sweet spot." The resulting economy is not perfect: there are still boom periods and recessions. But the Federation economic engine is extremely dynamic and robust, and Federation citizens enjoy the highest standard of living among all the major empires.

One particularly difficult question is the matter of import duties and restrictions by planets inside the Federation. In theory, free trade is the rule, and any planet can freely ship its products to markets on other planets (at least, those not under quarantine or protected by the Prime Directive). The realities of biology provide exceptions. Common substances on one planet may be powerful narcotics or dangerous poisons to a species residing on another planet, and all planets have the right to ban the importation of such substances. Planets are also allowed to prevent the importation of goods or substances which are defective or contaminated, and some planets have more restrictive environmental laws that others. (It is illegal to ship just about anything containing lead or bismuth to Earth, for example.)

There are also extensive laws to prevent predatory trade practices. A planet which pays its workers seven credits per hour can be prevented from shipping finished goods to a planet that pays its own workers 12 credits per hour, as this would destroy local industries. Sometimes, such imports are allowed only if an import duty is paid to make the prices "fair" in the marketplace. No planet wants another planet to export its unemployment. (No one in the Federation is actually unemployed, see the Social Contract section below, but all planets prefer their workers to be in productive jobs rather than taxpayer-funded community service.) New colony planets are often allowed to export such low-cost goods, but do not export enough volume to disrupt any other planet's economy or industry.

All of this is seen by some planets as a means to prevent the importation of items which would compete (fairly or otherwise) with local industry. Such trade disputes are resolved by the Bureau of Arbitration.

Other Aspects of the Federation

THE SOCIAL CONTRACT

The basic bargain that the Federation strikes with its citizens is called the Social Contract System. The principle is simple: anyone who is able-bodied and/or able-minded (and unable to find and hold a job in the private sector), who is willing to work 30 hours a week on community service projects, receives enough monetary compensation and support from society to have what is called the "baseline" lifestyle: food, clothing, shelter, education, health care, and opportunities for leisure and entertainment. Note that the "baseline" lifestyle in the Federation is extraordinarily comfortable by the standards enjoyed by 99.99% of humans who have ever lived. The basic principle is that if you are willing to work, you're not going to starve. The harder you work, the more you will get ahead. And if you have genuine bad luck in your life, society will help you get back on your feet, provided that's what you really want to do.

Education and health care are provided to all citizens of the Federation. Education at public schools from kindergarten through high school is free to all; tuition vouchers for certified private institutions are provided, as long as those institutions accept and teach the principles of the

Federation Charter. All schools, public and private, must conduct standardized testing and those unable to deliver a quality education are de-certified. University education at publicly funded institutions is also free through the associate level for liberals arts (and other "soft" curriculae), and through the bachelor's level for "career degrees" such as engineering, accounting, business, or sciences. In all cases, students who cannot maintain an acceptable performance level lose their free tuition, but can pay for readmission. Bachelor's degrees at private institutions (which may have more prestige), and graduate education at both public and private universities, can be funded through grants and low-interest student loans or by the student's family. The military and some government agencies also offer a number of scholarships in exchange for later service. Many who get medical or engineering degrees agree to spend years on a colony world, for example.

Health care is free of direct charge for citizens, through the series of public hospitals and clinics located on every Federation planet and funded by taxpayer credits. Many doctors work for the government directly, while others (usually specialists) serve in private practice. The government serves as the central "payer" to which a private-practice physician submits his bill. The Ministry of Health, with input from the Federation Medical Association, revises the Table of Remuneration for Private Practice every two years. As medicine is a difficult discipline to master, physicians are given ample (if not extravagant) compensation in order to recruit the best and brightest minds to this critical profession.

It should be noted that TL12 medical care is exceptionally good by TL7-8 standards, and that many difficult and expensive to manage or cure health problems for 21st-century humans are easily curable in the Federation. Kidney failure, for example, required expensive dialysis treatments at TL7-8. At TL12, most kidney problems are easily solved through medication, or (in rare cases) artificial organs, eliminating the need for expensive lifelong treatments. For a citizen of the Federation to die from a preventable or curable illness, or to be denied medical care for reasons of cost, is almost unthinkable.

While education and health care are free and "socialized" by 21st-century standards, most of the rest of the economy operates on a market basis. Aggressive corporations vie with one another in the strong consumer goods market. Mining, manufacturing, almost all heavy industry, food production, software, military equipment, general technology, and virtually all consumer goods and services are provided primarily by the private sector. There are huge corporations, smaller medium-sized entities, and untold countless mom-and-pop operations.

As part of the Social Contract, there is a minimum wage, enough for a nuclear family with a full-time breadwinner to keep house and hearth intact. Housing is not paid for by the government directly: people rent apartments or houses, or purchase them directly or with private mortgages, although the government does provide some guarantees to banks to encourage mortgage lending.

The "creative destruction" of capitalism sometimes results in people losing their jobs through no fault of their own. In such cases, unemployment insurance is available for up to one year. At that time, if the recipient has not been able to find a job, they will be required to perform community service in order to receive their monthly unemployment credits. This can be anything from tutoring students, to tending a park, to fighting forest fires, to working for a road maintenance crew, to performing janitorial duty. The point is for the individual to give something back to society in exchange for support during what is assumed to be a temporary period of unemployment. Such community service can sometimes morph into an actual government job, if there is an open position and the individual is properly qualified.

In some cases, a local economy may simply not provide enough job opportunities. In cases such as this, if individuals cannot afford to move to where the jobs are, they may apply for a travel voucher, enabling a move to another part of their planet or to an off-world colony or another member world. Their travel vouchers must be repaid through community service (or actual payment) at the destination. Resettling allowances are also available, enabling people to help set up their household at a new location. Again, these must be repaid through community service or actual payment. Many new colony worlds actively recruit unemployed individuals or those seeking a fresh start in a new environment.

Not everyone, of course, is able-bodied or able-minded, and such persons are not forgotten by society. Pensions are provided for the elderly, the sick, and the disabled. Retirement age is 75 for Humans (this is adjusted for other species depending on the average lifespan as calculated by the Ministry of Health every five years), at which point the government pension kicks in. Persons too sick to work, or who are disabled, may apply for this pension earlier. You won't get wealthy on a government pension, but you won't end up in the street either.

There is some abuse of the Social Contract system, of course, and people occasionally slip through the cracks. There are still lazy people, and some people who manipulate the system to stay "on the dole" as much as possible, although the system of community service usually gets at least something in return from such people. There are still criminals and fraudsters, bickering and infighting. There are still homeless people, although virtually all of them are there out of choice rather than bad luck or circumstance. The Federation is not a total utopia. But generally speaking, the combination of the dynamic Federation economy, high technology, and the Social Contract provides a remarkable standard of living for even the average citizen. Of course, just as some people lack drive, are lazy, and do little with their lives, others have great ambitions and talents and end up quite wealthy.

Federation government operations are funded through a variety of taxes. These include:

- A value-added tax on goods and services.
- A tax paid by the governments of member worlds based on yearly Gross Planetary Product. Full members pay a higher share of their GPP than associate members.

• Tariffs paid on products imported from non-Federation worlds. (During the General War era, there were no internal tariff barriers inside the Federation itself, between member worlds, but tariffs were imposed on goods imported from outside.) Smugglers often try to avoid such tariffs.

• A small, flat tax placed on individual incomes.

FEDERATION JUSTICE

The Federation Charter sets forth the principle of "Sentient Rights," and full recognition and acceptance of these rights is a firm requirement of Federation membership. These rights are expressed in the form of Guarantees. These original Nine Guarantees are:

• Guarantee of Equality: All citizens of the Federation are equal before the law, regardless of species or any other consideration.

• Free Speech: Speech cannot be restricted by the government. (Hateful speech is shunned, libel and slander are handled by the courts, and irresponsible speech is subject to prosecution if it causes injury or other physical or financial harm.)

• Freedom of the Press: The government cannot restrict the press. (There are laws against publishing classified or confidential information, as well as against libel and slander. A journalist who uncovers evidence of a crime by a public official or by any individual in a position of authority or responsibility routinely obtains judicial permission to publish it after a brief investigation. This is mostly done to give the police a chance to make a surprise arrest.)

• Freedom of the Person: The government cannot search a person or place, arrest a citizen, or seize property without a warrant issued by a court based on probable cause or eminent domain. (The right to own and obtain a permit to carry firearms is sacrosanct, but few have any need for weapons on most civilized planets, and committing a crime with a firearm is a major felony.) In the case of isolated outposts without any nearby judicial authority, the senior military officer (or civilian official) present may make such authorizations, subject to later review.

• Freedom of Religion and Conscience: The government cannot impose religion on its citizens, nor can it restrict the exercise of religion. (Certain "religious" practices such as human sacrifice, cruelty to animals, or abuse of a minor are prohibited by statute.)

• Freedom of Association and Assembly: The government cannot restrict meetings, ban political parties, or prevent individuals from associating with any groups they wish to associate with. (Cities require, but routinely issue, parade permits for assemblies which will block traffic, and other such obvious and logical ordinances exist.)

• Freedom of Trial: All sentients accused of a crime are entitled to a speedy trial by jury, cannot be forced to incriminate themselves, and must be able to confront their accusers. Evidence obtained illegally cannot be presented at trial. (Military justice has somewhat different rules which still preserve the rights of the accused.)

• Dignity of the Person: The government cannot torture or cause physical pain or emotional torment to a sentient. Excessive fines and bail are also forbidden. Cruel and unusual punishment is forbidden.

• Freedom of the Vote: All citizens are eligible to vote and cannot be prevented from doing so through the use of voting tests or poll taxes. (Those held in prisons or insane asylums cannot vote. Those who have not reached the local age of adulthood cannot vote.)

Additional Guarantees have been added to the Charter at various times, but the original Nine Freedoms are considered the most important.

Federation justice is conducted mostly at the local level. Each member is required to accept the Guarantees of the Federation Charter and to conduct their judicial affairs and law enforcement within the principles set forth.

The Ministry of Justice scrutinizes local laws to ensure compliance with the Charter. Crimes against the Federation itself (treason, espionage) or those committed on Federation-controlled installations or colonies are handled by the Interstellar Court of Justice, which has courts at the provincial, regional, and Federal level, all the way to the apex at the Supreme Court itself.

The procedures involved in the criminal justice system can be rather complex and difficult for non-attorneys to understand. Federation justice, based on Human, Rigellian, and Vulcan legal traditions, provides strong protections for the accused. Jurors are instructed to assess guilt only in cases that are "beyond a reasonable doubt." Unlike the Klingons and Romulans, the Federation would rather err on the side of the accused rather than the accuser, presuming innocence unless guilt is proved beyond a reasonable doubt. The concept of sending an innocent person to prison due to a malfunction, accidental or deliberate, in the justice system is anathema to most Federation citizens. (Andor is noted to be slightly more likely to convict someone accused of a violent crime, or to hold them indefinitely while investigating the case.)

For civilians, the Federation Charter allows for the death penalty only in two extreme cases: espionage or

treason resulting in the death of Federation citizens, or mass murder (including serial killers). All death penalty cases are automatically appealed for review to the ICJ, even if they are originally tried at the local level. In almost all cases, the death penalty is set aside and the convicted is sentenced to life in prison without any possibility of parole. In only one case is the death penalty mandatory: contact with Talos IV.

The military justice system operates along slightly different lines, but in accordance with the same principles. Minor offenses are subjected to non-judicial punishment (the commanding officer hears the case and assigns a penalty) but felonies require a trial that is similar to a civilian one (except that the "jury" is composed of officers, not "one's peers"). In the military, illegally obtained evidence can be submitted at trial if it is proven valid and relevant (whoever violated regulations obtaining it is punished) and the death penalty requires no ICJ review during wartime.

THE PRIME DIRECTIVE

This is a much misunderstood Federation doctrine, not least because it becomes confused with the different (but not directly related) doctrine on non-interference. The Prime Directive was added as an amendment to the Federation Charter in Y88. It reads:

"The Federation believes in the right of all pre-spaceflight societies to develop at their own pace and in their own way. Members of the Federation will avoid contact with such societies. When such contact is necessary or is authorized by the Federation Council for scientific purposes, the people and government of such societies are not to be told that the visiting Federation citizens are from another planet, nor that there are societies on other planets with spaceflight capabilities, nor is any Federation citizen to take an action which would make known their presence as aliens capable of spaceflight. Federation members, citizens, and officials are to take steps to prevent any such contact by other spaceflight-capable species, and to remove or balance such contamination if it occurs. The governments of societies which achieve spaceflight may be contacted if authorized by the Federation Council, and societies within the Federation Treaty Zone which achieve warp-capable spaceflight, or (if the Council approves) are on the verge of doing so, will be contacted and encouraged to join the Federation, including the acceptance of its laws. Violation of this Directive is subject to the harshest penalties available under Federation law."

The intent is clear: unless a species has warp travel, or is about to achieve it, it is to be left alone. When study of them is authorized, or when emergency situations place Federation citizens on such a world, they are not to tell the locals about other species. Most societies which can see stars and have telescopes have guessed that other societies exist on other planets, but guessing and knowing are two different things. History shows that planets contacted too early in their development often suffer catastrophic social or political effects.

Pirates or criminals often try to contact such planets to sell them "miraculous" items of common TL12 technology and cheat them out of resources. As unscrupulous local businessmen or officials usually keep contacts with off-world pirates secret, cleaning up such contamination is usually possible, when detected.

A Federation starship could destroy an asteroid about to hit a populated pre-spaceflight planet, but the ship must take every available measure to avoid detection. A starship would not normally interfere in a non-extinction level natural disaster or intraplanetary war if its presence would become known, although exceptions are sometimes granted by the Council (rarely, retroactively) under the doctrine of "exigent circumstances." More than one starship captain has convinced himself that he must violate the Prime Directive to save millions of lives, even if it means the surviving society cannot continue normal development as it would learn of starfaring species. In some cases, captains have been imprisoned, dismissed from the service, or transferred to ground assignments as punishment. In rare cases a captain has been found to have done the right thing. It is a case-by-case evaluation. A society which is unable to develop because of some enslaving force might be "rescued" by Star Fleet, but usually after months of debate in the Council.

A more complex issue is the "non-interference" policy, interpretation of which has changed periodically. The Federation expects all member worlds to adhere to a certain standard of sentient rights, including a multiparty free market democracy. Planetary governments which are dictatorships are not invited to join the Federation, and no planet within the Federation Treaty Zone would be allowed to join another empire (e.g., the Klingons, the Romulans, etc.). Many planets within the zone which have spaceflight and have been contacted remain as non-members for a variety of reasons, some permanently and others for a period of adjustment and transition. Some of these planets have treaties of friendship and trade with the Federation, but are not interested (for whatever reason) in becoming actual members. The Federation tries to avoid interfering in the internal affairs of non-member planets even if they do not meet the societal standards of the Federation, but intervention has been authorized in extreme cases, usually to prevent nuclear war or genocide. The problem is not so much a principle of avoiding intervention because intervention is "evil," but rather the fact that even the resources of the Federation are limited. Star Fleet cannot send entire fleets of ships or divisions of Marines to every planet that has a poor government. It is also true that intervention often does more harm than good, especially when dealing with cultures radically different than one's own.

The Federation can and will intervene in the case of a member planet which backslides and violates standards of law, sentient rights, and fair government. Such intervention is more likely to be in the form of nonviolent actions (e.g., judicial orders, trade sanctions, suspension of the voting rights of that planet's representatives) than by a military invasion.

FEDERATION GOVERNMENT

The Federation has a President, who (as the term defines) "presides" over the Federation; he (or she) does not "rule" or "reign" over it. The President is a ceremonial "head of state" with no real power and the position is usually occupied by a retired elder statesman. The President is elected by the Assembly.

Real power rests with the Chairman, who is elected by the Council as "head of government." The Chairman appoints (with the approval of the Council) a cabinet of "secretaries" who each deal with a specific field (justice, foreign relations, internal relations, industry, resources, colonial development, military, etc.).

The Council is the equivalent of the U.S. Senate or British House of Lords, including a voting representative from each member planet and a non-voting representative from each associate member planet. Each province has one non-voting delegate who represents all of the smaller planets, colonies, and other population of that province. In many cases, planets send an unofficial non-voting representative to the Council who is invited to certain meetings to present the views of (or answer questions about) his planet. Star Fleet also has such a designated representative. The "real business" of the Council is often done without the non-voting and unofficial members.

The Assembly is a much larger body, including one representative for each 100 million sentient beings on planets with an indigenous population. Each district also has a representative who conveys the interests of all citizens in his district who are on smaller colony planets not otherwise represented. (If the sum total of such colonies exceeds 150 million, two representatives would be selected. Some districts closer to the Federation core worlds have as many as five delegates representing minor colony worlds.) This situation is confused in some cases by "sponsored colonies." A colony in one province which is sponsored by a member planet in another province may be counted by the sponsoring planet as part of its native population and would be represented by that sponsoring planet. In some cases, the Federation Council will vote to declare that a given "sponsored colony" must be included in the district representation rather than the sponsor's representative because a majority of the citizens of that colony are not citizens of the sponsoring planet.

PLANETS OF THE FEDERATION

There are many planets inside the Federation, and while all of them are unique, they do fall into several broad categories. All planets which conduct interstellar trade do so under Federation rules, which require certain standards of living for workers so that a given planet cannot grow rich from exporting the labors of a huge class of impoverished citizens.

Member planets are those which are more properly "full members" or "senior members" of the Federation. These are the major industrial and economic worlds which drive the Federation economy and fund most of its military. Most were those with indigenous species who achieved space flight on their own, but some were settled by other planets. By the time of the General War, there were still only a handful of such planets, including: Earth, Mars (Earth-descended humans), Alpha-Centauri (not a major economic planet and a full member only because it was close to Earth and joined the Federation in its earliest days), Vulcan, the Vulcan sister-world of Vultrax, Andor, and Rigel (three planets in that system had member status, all populated by Rigellians). These planets have membership on the Council and a major say in all decisions. All member planets must meet the standards of the Federation charter for a multi-party free-market democracy with an independent press and judiciary, and must adhere to the sentient-rights standards of the Federation Charter. These planets pay a proportionately higher share of the Federation's budget. Full members have the first right to establish colonies on unoccupied planets in accordance with the rules on colonization.

Associate member planets are those with major populations, significant industry, spaceflight capability, and advanced technology, but which have not yet reached full member status. These planets have seats in the Assembly but non-voting seats in the Council, and pay a lower tax rate. They must meet the same political and sentient-rights standards as full members. Associate members have the right to establish colonies on unoccupied planets in accordance with the rules on colonization.

Prospective planets are those which can be expected to achieve associate membership. They either meet the political and sentient-rights standards or are actively trying to achieve them. Such planets are allowed to establish a limited number of colonies on other planets and their citizens can usually obtain permission to join the Federation military. All of these planets must meet the economic standards for free trade.

Probationary planets are those with native populations and spaceflight capabilities. They are not members of the Federation, although they are within its territory. Some planets refuse to become members or do not qualify for membership due to their economic or political standards; some simply don't want to pay taxes. Probationary planets are allowed to trade only under rules that prevent them

from taking economic advantages; if the Federation feels they do not pay their workers enough, then exports are taxed (to bring their cost up to that of other planets) and the money is held in trust for the workers when the political situation changes. Probationary planets are not allowed to establish colonies outside of their own system, but are regarded as "owning" their own system. Citizens of these planets can join the Federation military only if the Federation Council approves the political and cultural suitability.

Proscribed planets are those few which are, for various reasons, banned from space and no contact is allowed with them. Most are brutal dictatorships. In rare cases, the Federation Council may try to overthrow and replace their governments to "save" the workers, but this is an expensive (and rarely successful) undertaking, usually done in secret. Citizens from these planets are not allowed into space except as part of diplomatic missions. The Orion Pirates often have illegal contact with such planets. In a few cases, the planet is so dangerous (due to local diseases or other phenomena) that contact cannot be allowed.

Uncontacted planets are those with native sentient populations which have not reached warp-powered space flight capability and as such are kept in a "state of innocence" by Federation law so they can develop naturally. In some cases, the Federation Council will authorize earlier contact. During the General War, dozens of such planets were contacted either because they were about to fall behind the advancing Coalition fleets (in which case they were warned of what to expect) or because the Federation needed some special contribution that the planet could make to the war effort. A special sub-category of this type of planet is one that was colonized by a Federation member planet during earlier times, but which had lost all contact with the original home world. These planets are reviewed on a case-by-case basis to see if the residents could emotionally deal with sudden re-contact.

Colony planets are those without native populations and are covered in a separate section below.

INTERNAL ORGANIZATION

The internal organization of the Federation is geographic, with regional, provincial (one province on the ***Federation & Empire*** map), and district (a district is one hex on the ***F&E*** map) governments. This is complicated and confused, however, by the presence of various member planets which are in some ways outside of this system and in other ways are part of it. Planets with major populations (which are almost always indigenous native populations resident for thousands if not millions of years) also form certain exceptions. While democracy is a good thing, if a given governmental division includes one planet with a population of 5 billion and 50 colony planets with a total population below 100 million, the principle of "one sentient, one vote" isn't really functional as it would effectively disenfranchise the colonists. It would be hard enough to recruit colonists without telling them that they lose all representation in government. In theory, each level of government includes both a geographic and per capita body, but the per capita body usually has certain upper and lower limits to prevent one planet from having an automatic majority and to prevent a majority being held by a tiny percentage of the overall population.

The Federation is divided into six "administrative regions," each with about 15 provinces and with each province having five-to-seven districts. Each region, province, and district has its own government, including a chief executive (with a cabinet of department heads), a council (geographic representation), and an assembly (per capita representation).

The Regional Governor is selected in an election by the district assemblies. The Regional Council includes one representative from each province, plus one from any planet with more than 250 million sentient citizens. The Regional Assembly includes one delegate for every 50 million citizens, but no less than one per district and no more than one per planet.

The Provincial Governor is selected by a direct election of the citizens of the province. The Provincial Council includes one elected representative from each district plus one from any planet with more than 100 million sentient citizens. The Provincial Assembly includes one delegate for every 10 million citizens, but no less than one per district and no more than one per planet.

The District Governor is selected by a direct election of the citizens of the district. The District Council includes 6-10 elected members, one for each planet with a population of 100 million plus others representing the balance of the population on dozens of worlds with smaller populations. Some districts have much smaller "non-planetary" populations than others and each of the members of the District Council represents more or fewer citizens than those in other Districts. The District Assembly includes 20-50 members, with the aggregate district population divided more or less evenly between them, but no one planet can have more than 1/3 of the seats. If, for example, a given district included one long-established colony with 10 million citizens, and a million citizens divided among 30 other colonies, and if the district had decided to have a total of 30 assemblymen, then the major planet would get 10 and the other 20 would each represent 50,000 citizens. Many assemblymen would probably have constituents on two or more planets.

In any such political system, there are constant fights over district divisions (which change every 10 years with the new census figures) as politicians try to "gerrymander" the opposing party or parties out of power. If a particular opposing politician is too much of a threat, one party might maneuver to transfer a planet whose citizens are not likely to vote for him into his constituency.

In rare cases (and with permission of higher levels of government) a planet might be treated as two or more separate colonies. In theory, this is done when two or three major geographic factions on a given planet are at odds and cannot agree on a joint representative, but once this loophole was added to the Federation Charter, some planets with relatively homogenous populations sought to be "severed" so they could escape the cap on the number of representatives from a single planet.

COLONIES AND COLONIZATION

The vast majority of Federation citizens spend their lives on their world of origin, raising families, working jobs, and generally living their lives in peace. But for some people the call of the frontier beckons. Perhaps they seek a new way of life, greater material riches, an intellectual or physical challenge, or comradeship with those of like social or religious mind.

Colonial migration is enhanced by the Federation's emphasis on social mobility; as a condition of Federation membership, new cultures entering the UFP must allow freedom of movement and easy emigration from planet to planet. If individuals (or groups) are unhappy with the nature of their homeworld, they may (for a nominal fee or sometimes with the assistance of government travel allowances in exchange for community service) simply move to a colony world where they feel more at home, perhaps one where like-minded individuals have gathered. The motivations of individual colonists are as diverse as the colonies themselves. (Moving to a "member" planet requires consent of that planet's government, which is done for the convenience of that planet and largely depends on whether their economy can absorb more people and whether the prospective immigrants can contribute to that economy.)

There are tens of thousands of colonies in the Federation. Each one is unique with some of them boasting populations well into the millions (in a few cases, for the oldest colonies, over a billion). Describing a "typical" Federation colony is virtually impossible, but they can be broadly categorized.

TYPES OF COLONIES

There are, in a sense, hundreds of different kinds of colonies but most can be grouped into four categories.

Sponsored colonies are those created by an independent planet. Member planets can sponsor colonies on any uninhabited planet declared fit for such colonization by completing certain steps and requirements with the Federation government. These requirements involve certain commitments of funds and resources because forming a colony is an expensive proposition. In theory, a single member planet could "claim" thousands of uninhabited planets, but since the requirements for such claims are high (including billions of credits and a million colonists) no member planet tries to start more than one such colony per year. Associate member planets and non-member planets can form such colonies with permission of the Federation Council, assuming the planets are willing to meet the requirements.

Sponsored colonies are under the control of the sponsoring planet, not of the regional, provincial, or district government. Imagine for a moment that the Federation was the United States of 1846, and that New York City had the right to set up a town named Lubbock inside the newly established province of Texas. Lubbock would then be under control of the New York City government (and pay taxes to New York, not to Austin, Texas), but would be a major element of the economy of Texas. The government of Texas might resent having its economy co-opted by a far away — but rich — government, but then again, Texas might welcome the investment because it could not afford to create Lubbock on its own. The Texans might even imagine that in a few generations the citizens of Lubbock would petition the government of the United States to break the link between Lubbock and New York, and Lubbock would then become a part of Texas. (Lubbock, or perhaps Texas, would have to pay New York for the value of its investment over a period of decades.)

Sponsored colonies are "owned" by their sponsors but under the administrative laws of the district, province, and region they are in. In our previous state example, Lubbock would have its own police force, but the Texas State Police would still have the right (and duty) to deal with crime and Texas would still collect import and export fees. The Federation police would still, of course, deal with piracy and higher legal cases.

Federation colonies are those ordered into creation by the Federation government itself (or by one of its subdivisions, within its own territory). This is usually done in the case of particularly valuable planets, either when the difficulties are too great for a single member planet to afford, or when the planet is so valuable than the Federation government is concerned that a single member planet would become too powerful if it controlled the planet, or when two or more Federation member planets want to colonize the same planet and none are willing to back off.

There is no minimum size for a Federation colony. In effect, a Federation colony is simply a sponsored colony that was sponsored by the Federation, or one of its political divisions, rather than by a member planet.

Politics play a role. If a particularly valuable planet were surveyed in a given region, several planets might try to claim it, as might the district, province, and region which contain it. The provincial government, for example, might not be too happy if a faraway member planet sponsored a colony on a valuable planet in their province if they could afford to create such a colony themselves.

In some cases, the Federation or one of its provinces will "buy" a sponsored colony from a member planet.

Franchised colonies are smaller in initial population and can be created by any member, associate, or non-member planet, or by any corporation, or indeed by any other group. These colonies can be of any size, but must meet certain requirements of funding and resources (in relation to the number of colonists). The rights of sentient beings must be observed, but the colony may well be owned outright by an industrial corporation and all of the citizens are employees.

Franchised colonies cannot claim an entire planet, but only a region of it commensurate with the population, finances, and resources available. The remainder of the planet could be claimed by other franchisees (after a two-year waiting period), although the Federation colonial ad-

ministration may well try to avoid settling multiple colonies on a planet when they are mutually antagonistic or when it appears likely that one would be dominated by another.

A planet which sponsors a franchised colony has the first option to upgrade this to a sponsored colony if it can afford the additional requirements; most sponsored colonies started as planetary-funded franchised colonies. Sometimes a corporation based on a member planet will set up a franchised colony on a given planet in order to convince the government of their own member planet that the colony would be successful and should be claimed as a sponsored colony.

Outpost, the final type of colony, is not a formal category. These have much smaller populations, and are often temporary in nature. Outposts can be set up by government departments, corporations, universities, planetary governments, or any level of the Federation government. They may be used for trade, as a base for an extensive survey, to study a specific site, or to exploit a specific resource. Some of these evolve into larger colonies while others are intended to exist only for a short time.

Pre-Existing Colonies: There is a peculiar category of Federation colonies that deserves note. In the period after warp-travel became possible and before the Federation came into formal existence, well more than a hundred planets were colonized by various groups (half of them from Earth, but also including many from Rigel, Andoria, and other major planets). Many of these colonies failed and died out, or were abandoned at the first opportunity, but dozens of them survived (and some even thrived). When the Federation was formally created, and then began to "claim territory," and finally announced the Border Declaration of Y102, there was a legal question about what to do with these colonies. None of them were very large (so their imports or exports were hardly a ripple in the evolving Federation economy), and yet, the Federation Council was loathe to allow inhabited planets to be part of the economy without a formal legal status.

The fundamental principles of the Federation Charter provided some guidance: the colonies themselves had to have the major say in their status. However, the Charter also created some problems, in that any recognized colony had to "fit into" one of the categories provided by Federation law. The situation was further complicated because most of these small self-contained colonies had been out of contact for generations, and experienced culture shock and an economic boom when they "rejoined" the "community." A colony of 5,000 people didn't need much more of a government than the recognized community leaders settling disputes, but when such a colony boomed to five times the original size in two years, the original occupants wanted some way to control what was going on. Policing a small colony simply consisted of a leader asking a few good citizens to deal with a problem. Policing a larger colony of new arrivals required an actual police force and a defined set of laws. Real estate law on a small colony consisted of simply building your house, farm, or factory on any piece of land nobody else was using without crowding the neighbors. Real estate law on a rapidly growing colony could not be handled so informally.

Moreover, a small community might take care of social welfare informally. (The local pastor would ask farmers for enough food to feed any orphans whose parents died of accident or disease). However, "joining" the Federation imposed a requirement to meet the local government's new duties under the Federation's "social contract" on a leadership that had never had to consider the implications of such a thing. New arrivals at a given colony (there to seek work in its booming mines or their own land to create farms) expected to find schools, hospitals, police, theaters, and no end of "government services" and looked to community leaders who had no idea how to accomplish this (or where to get the money to do so, e.g., taxes, land sales, etc.).

The Federation Council worked out a solution. The obvious place to start was to retroactively fit these colonies into the relatively new Federation laws for new colonies. There was no accusation that the colonists had done anything "wrong" by setting up their colonies, but the community leaders had to work out with the Federation just how they were going to join it. Some colonies became "sponsored" by the planets that the colonists came from. Others were given "franchises" by the Federation retroactively. In all cases, the local governments were recognized as such, and the Federation provided advice in how to meet their new and broader responsibilities.

There were exceptions. Two of these pre-existing colonies were virtual dictatorships and were proscribed from contact by the rest of the Federation. Another was found to be a virtual "slave state" and the "government" was removed by Federation Marines to the cheers of the enslaved colonists. A few purely criminal operations were shut down by Federation marshals.

The most troubling situations were those that had "forgotten" they *were* colonies. These had to be treated carefully as First Contact situations under the Prime Directive.

COLONIZATION PROCEDURE

The Federation Commission for Colonization has established a series of "phases" or steps in colonial development, from the initial discovery of a new world through becoming an independent member of the Federation. Generally speaking, all "types" of the colonies mentioned above go through these steps, although in reality most colonies never make it beyond Colonization Phase III, and are not expected to do so.

Pre-Colonization Phase A: Discovery and Survey

The first step is the most obvious one: the discovery of a new solar system and the planets thereof.

Each province of the Federation contains tens of thousands of star systems, thousands of which have planets worth colonizing or exploiting. Some of these provinces, even into the General War era, have never been fully mapped, particularly in the more coreward regions. The process to map them is ongoing. Stars most likely to harbor life or habitable worlds (stellar classifications F, G, and K) are examined first. Automated probes launched by the

Federation and member planet exploration agencies such as the United Earth Space Probe Agency (UESPA, the exploration arm of the Earth National Guard) often take the initial readings in a star system, enough to discern whether manned investigation is warranted. (Just "sending a starship over to take a look" costs money which somebody has to pay.) In some cases, it is a ship from Star Fleet, a member planet exploration agency, or a private vessel which makes the discovery.

All Class-M (earthlike), Class-L (earthlike, but drier), and Class-N (oceanic) planets are automatically rated as PCC-1 (Pre-Colonization Category 1, worthy of manned investigation). Planets of other classifications are rated on a sliding scale of interest, from PCC-2 through PCC-10, depending on if there is evidence of valuable minerals, other resources, or anything of scientific interest. In all cases, word that a potential colony planet has been discovered is transmitted back to the Federation Commission for Colonization, which examines the data and confirms (or alters) the initial PCC rating. This information is formally published and the data is public record.

Information about planets which are not habitable or are not good colonization candidates, but which may contain exploitable recourses, is turned over to the Bureau of Galactic Resources. As described in the government section, the BGR issues Claim Certificates for resource exploitation in systems that are not formally colonized.

Once the planet is discovered and given a PCC rating, a preliminary survey is conducted. In cases where a manned ship made the initial discovery, the preliminary survey is usually conducted at the same time as the initial discovery, assuming that time allows. Even frigate-sized Star Fleet ships have well-trained science staffs and are capable of making the initial manned survey of a new planet. The Federation *Constitution*-class cruisers, for example, are notable for their extensive laboratory facilities, nearly as good as a dedicated survey cruiser. The *Saladin*-class destroyers and the *Hermes*-class scouts, designed in parallel with the *Constitution* class and using many of the same components, are also excellent exploration craft. The Galactic Survey Cruisers of the *Byrd* class are even more capable than the *Constitution*-class cruisers due to their outstanding sensor suites, but they are expensive to build, and their limited numbers are usually deployed in the least-mapped areas most in need of survey work.

If the discovering ship does not have the time or facilities to make the preliminary survey, the planet will be listed by the FCC as "In Need of Preliminary Survey." Star Fleet, another agency, private corporations, or public interests such as a university may "sign up" and receive a charter from the FCC to conduct such a survey. Funding for the survey may be provided by the FCC.

The initial survey itself consists of scientific studies (geological, meteorological, biological, etc.) of the planet that serve to confirm (or dispute) the first report. The basic cartography of the planet is mapped, atmospheric and biological samples are taken, and scans to locate mineral resources and other areas of interest are conducted. Most of this is done from orbit and takes about a week, but landing parties and remote probes are sent to some areas. Of course the most important question that the preliminary survey answers is this: does this planet have native sentient life? If the answer is yes, the initial survey determines the relative level of technology and social development, and whether or not the planet is likely to fall under the rubric of the Prime Directive. If the answer is no, the colonization process continues.

Under no circumstances will a planet harboring native sentient life be deliberately colonized. There have been a few cases where a species not initially recognized as being sentient was later determined to be so. In those cases the colony was removed and cultural contamination "cleaned up" as much as possible. In at least one case, the native population asked the colonists to stay and help them advance economically, and the contamination was deemed too extensive to remove.

Pre-Colonization Phase B: Detailed Survey

This phase sometimes, depending on the situation, overlaps with the first phase. The detailed survey is exactly what it sounds like: a more intense process than the preliminary survey, usually lasting several weeks or a few months. The planet is thoroughly mapped in detail. Resources are located. In some cases, preliminary settlement sites are identified. Landing parties are sent to the surface, looking for any sign of previous inhabitants, gathering soil and biological samples, examining possible mineral and ore finds, looking for signs of previous unauthorized activities (mining, colonization, survivors from crashed spacecraft, etc.), making *absolutely certain* that there is no sentient life, etc.

Sometimes Star Fleet, UESPA, or other government agencies do this, but the FCC will often grant exploration charters to private corporations, universities, or other groups. Even some religious groups operate survey vessels dedicated to detailed survey work. The Jesuits of the Roman Catholic Church, the missionaries of the Church of Jesus Christ of Latter Day Saints, the Vulcan J'haniar Sect, and the Sery'vetai Order of Cygnus are particularly active in this regard.

In some cases, the detailed survey finds that the planet is not suitable for colonial development even if it has no sentient life. This could be due to a native disease, unusual weather conditions, astronomical factors such as too many solar flares from the parent star, dangerous native life forms, addictive chemicals, lack of worthwhile resources, or some other issue. These conditions may change the PCC rating. Many planets are reclassified by such review processes every year, and sometimes this process becomes highly political as a potentially sponsoring planet wants to move a potential colony into a category that is less expensive to establish.

Planets considered to be especially dangerous, for whatever reason, are placed under quarantine. Warning beacons and sensor buoys will be placed in orbit, and occasional checks will be performed by Star Fleet and the Federation Police to ensure that no unauthorized personnel are present. Orion Pirates are known to conduct op-

erations on such quarantined planets, using them for clandestine mining operations or for hidden bases. The Federation tries to prevent this as much as possible through patrols and the placement of sensor beacons, but pirates and other unscrupulous operators often find clever ways around such measures. As a practical matter, it is easier for such criminals to exploit unsurveyed planets than quarantined planets, but in some cases, the cause of the quarantine (such as dangerous chemical substances that act as narcotics for one species or another) may make quarantined planets particularly attractive to criminals.

If the survey concludes that the planet is suitable, it proceeds to the next step: allocation.

Pre-Colonization Phase C: Allocation

Of all the activities of the Federation Commission for Colonization, allocation of colony worlds is the most important, and most contentious.

When a planet goes on the allocation list, the FCC accepts official "Requests for Colonization Authority" (RCAs) for six months. RCAs can come from Federation member worlds, the various bureaucracies of the central Federation government, Star Fleet, private corporations, public interest groups, universities, and religious or social groups. A colonial world of only average interest may generate just two or three RCAs from interested parties. A planet of great interest, for example a world with massive mineral deposits, excellent agricultural potential, or an idyllic climate (or, in the best cases, all three) may generate several dozen RCAs.

Writing RCAs is an art in itself. The average RCA contains hundreds of documents describing what the colony will be used for, where the funds for its operations will come from, who will move there and why, what resources will be made available and why the FCC can be certain they remain available, why establishing a particular colonization plan would benefit the Federation more than a different one, etc.

After the six-month application deadline, the FCC examines the various RCAs and makes a decision as to which entity to award the colony. By law, the FCC's decision must come within 12 months. The FCC can request a six-month extension from the Federation Council if the decision is difficult. In some cases the decision is relatively easy, but in many cases it is not. In rare cases, if the planet has generated a huge number of RCAs, the strongest applicants are invited to resubmit with more details or clarifications, while the rest are rejected. In extremely rare cases, the Federation Council itself may take responsibility for the final decision. (As a matter of procedure, the Federation Council routinely rubber-stamps the decisions of the FCC.) It is theoretically possible for a member planet to sue in the Supreme Court if it feels that the allocation process has become corrupted, but such suits are never frivolous and are virtually unknown. The mere fact that a rejected applicant has access to such measures ensures that nothing is done that would invite judicial intervention.

Officially, the FCC maintains an allocation balance between public and private colonies, various interest groups, and the Federation member worlds. Nevertheless, the process can be politically contentious, and the relative emphasis in colony types varies depending on the administration in power. Generally speaking, Unionist governments tend to favor establishment of colonies devoted to scientific, agricultural, and social pursuits, while Federalist governments tend to approve more colonies devoted to mining and resource extraction. The difference is not great and is more of a slight emphasis than a dramatic shift: on average, a Unionist-dominated FCC authorizes about 5% more scientifically oriented colonies than a Federalist FCC. Note that the FCC is supposed to be non-partisan in its deliberations, and that all of the political parties, as well as the press, monitor FCC allocations closely. Too many colonial "earmarks" by administrations of either stripe generate strong criticism and become fodder for political campaigns. This is one reason that the Federation has "freedom of the press" as the media delight in discovering that the current ruling party is favoring its own interests a bit too often.

During times of war, the allocation process is accelerated and colonies established by Star Fleet, the Federation Police or National Guards, and the Federation central government are given much greater priority. During particularly desperate times, the uniformed services often establish bases/colonies without prior approval of the FCC, although the Prime Directive will be observed except in the most extreme circumstances. The FCC will almost always approve such "on the fly" colonies retroactively, although many military "colonies" were turned over to civilian control after FCC review following the end of hostilities. Such military colonies, having infrastructure that is already paid for, are prime candidates for civilian colonization. Indeed, the mere fact that Star Fleet has "shown an interest" in buying the future production of a given planet makes it a valuable one.

Pre-Colonization Phase D: Pioneering

Once an RCA is accepted, the entity granted the authority to establish a colony usually sends out a "Pioneer Group" to prepare for the arrival of the colony itself. The exact nature of such pioneers varies depending on who is setting up the colony and the purpose of the colony. In many cases, an independent scout will arrive at the planet some months before the main group of pioneers, to explore locations and "get a feel" for what it is like to actually live on the planet. Such independent scouts tend to be highly trained, experienced, but quirky "loners" who prefer their own company. In some cases, married or committed couples undertake such independent scout missions. Retired military personnel often enjoy such a lifestyle. The FCC often authorizes such advance scouts (from a pool of independent contractors, not from any of the "bidders") as part of the earlier surveys.

The Pioneer Group that follows the independent scout within a few months can vary between five and 30 individuals. Each member is fully qualified in at least two specialties (and preferably three). For example, a farmer/botanist might also be qualified as a security officer, or a com-

munications technician might also be a cook. These personnel are highly trained, highly in demand, and highly paid. Many are ex-military, and all must be resourceful and willing to spend months in primitive conditions.

They will usually arrive with a particular mission in mind from the authorizing colonial authority: confirm mineralogical readings, prepare a certain area for settlement, categorize as many insect species as possible, etc. Pioneer Groups often function in a similar way to the famous "Prime Teams" controlled by Star Fleet. Indeed, some Pioneer Groups are actually retired Prime Teams who have left the service but still enjoy operating together. A well-regarded and experienced Pioneer Group with a good reputation can make an excellent living before the members eventually retire to one of the planets they surveyed.

Pioneers generally stay at the planet for one local year, sometimes two years, depending on the exact nature of their assignment and how fast the sponsoring entity can deploy the next phase of colonization. Ideally, the pioneers will finish their work some months before the arrival of the Phase I colonists, and will have prepared a full report for the new arrivals, outlining everything they've learned, both good and bad, about the new world.

In some cases, multiple Pioneer Groups are placed on a single planet, each exploring a different area.

In some cases, Phase D is skipped. If an especially valuable or strategic world must be colonized quickly, the process may go from Pre-Colonization Phase C directly to Colonization Phase I. The FCC tries to discourage this, regarding the pioneer phase as a very important factor in ensuring the success of a colony. Many Pioneer Groups discover hidden hazards on new worlds that the preliminary and detailed surveys miss, their discoveries enabling the later colonists to adapt without undue loss of life or property. In rare cases, Pioneer Groups have determined that a planet is actually *not* a good candidate for colonization. However, given the pressure for resources (especially during the General War), it was not always possible to follow the most desirable procedure in every case.

In some cases, these Pioneer Groups will explore the first colonization site, then move to other potential sites on other continents after the Phase I colonists arrive.

Colonization Phase I: Establishment

Phase I begins with the arrival of the first "real" group of colonists, usually between 50 and 200 people, depending on the exact purpose of the colony. (This is for a franchised colony. Sponsored colonies, with the economic might of a member planet behind them, may well start with larger populations. The point is to not deliver more people than can quickly support themselves. A member planet can pay to support the larger number of colonists for a longer period of time.) In many cases, the Pioneer Group will stay with the colony for some period of time, showing them the ropes, so to speak, of the new world. In rare cases the Pioneer Group will actually join the colony permanently; in most cases the pioneers move off to their next assignment or go somewhere "civilized" for a long vacation.

The purpose of Phase I is to simply establish a foothold on a new world. In most cases, the authorizing authority for the colony will arrange for occasional supply drops and medical checks. Star Fleet or the relevant National Guard will usually handle this duty if the colony is sponsored by the military, a central government agency, or a UFP member government. For private or corporate colonies, civilian ships usually handle these tasks, although occasionally the military will do so (under contract) if the area in question is dangerous or isolated.

During Phase I, immigration to the colony is strictly controlled under FCC supervision. The population will grow slowly, with births and occasional new arrivals (to replace sick or deceased individuals or to bring in someone new with specifically needed skills) but there are usually no huge infusions of population from the outside. The average is 25-30 new arrivals per year, increasing to 40-50 per year later in the phase. Most colonies spend between 10 and 15 years at Phase I, long enough to demonstrate that life on the planet is possible and that there is no lurking undetected danger. This timetable can be accelerated under certain circumstances, but the FCC must approve the progress of the colony before Phase II officially begins.

Military-sponsored colonies, and sometimes colonies sponsored by member planets, can be developed much more quickly, sending thousands of colonists to the planet in short order. The problem with such "shake and bake" colonies is that they are heavily dependent on outside resources. The normal colonial growth ensures that local resources are developed (in an environmentally responsible way) for long-term usage, and that new colonists arrive only as fast as local resources can support them.

Things are often different in the case of planets which are suitable only for mining (planets normally "uninhabitable," such as those with toxic or no atmosphere), and require constant supplies of outside resources even if they are in place for generations. If there are rich supplies of minerals to extract, and no real environment to protect, corporations or other sponsoring agencies may install prefabricated habitation modules and bring in workers as fast as possible.

Colonization Phase II: Controlled Growth

Following FCC approval, Phase II starts. This is called the "Controlled Growth" phase. Immigration restrictions to the new world are eased greatly, although not eliminated entirely, and the FCC will monitor the number of new arrivals to help ensure that infrastructure is not overstressed and that the colonizing authority is not pushing things too quickly. For many colonies, this results in a "boom" period with an influx of new residents and a rapidly growing economy. This sometimes causes social and political conflicts with the Phase I colonists, another situation that the FCC monitors closely. A franchised colony will grow no faster than it can provide a means for new arrivals to support themselves, i.e., the colony must prove it has a job waiting for each new arrival. A sponsored colony may grow much faster as the sponsoring planet could pay for the upkeep of new colonists until new farms, mines, or factories can be built. Even in the case of a sponsored colony,

the FCC will monitor population growth as it does not want to see a sponsoring planet dump millions of unwanted people on a colony and then abandon them. The FCC will not allow a sponsoring planet to send more people than can be employed in a reasonable time.

Phase II can last an indefinite period, but the average is five years. By the end of Phase II, a successful colony will likely have several thousand residents and three or more settlements. A local political structure, akin to a city or county government on Earth and in line with Federation norms for democratic representation, must be in successful operation by the end of Phase II

Colonization Phase III: Sustained Growth

At Phase III, FCC controls on immigration are lifted further, and in some cases (depending on the type of colony), lifted entirely. (The colony may well have its own restrictions, barring people with criminal records or those who want to spend their lives collecting unemployment.) As the colony grows, it is expected to take on more and more responsibility, in terms of law enforcement and defense against pirates and raiders. There is no set end to Phase III; the majority of colonies remain at this phase indefinitely. Phase III colonies have populations ranging from tens of thousands to hundreds of millions.

Colonization Phase IV: Independence

A select few colonies grow in economic strength, population size, and political influence to the point where they become as important to the Federation as some member worlds. Some of these colonies petition for recognition as Federation members, with a seat on the Assembly. Others remain tied politically to their original homeworlds. The most famous case was Mars declaring independence from United Earth in Y36. The peaceful resolution of that event did much to set the precedent that all such cases must be resolved without violence and in accord with Federation principles regarding self-determination. Certainly, any member planet that tried to hold onto an independence-seeking colony through force would face harsh measures in the Council and Assembly, if not outright expulsion from the UFP itself. On the other hand, a sponsor may well have invested considerable resources in the colony and a grant of independence by the UFP will usually include a considerable amount of debt to the original sponsor which must be paid off over an extended period, perhaps 20 or 30 years. This is nothing unusual; many municipalities on Earth in the 21st century use "bonds" to pay for new infrastructure (schools, highways, a courthouse), and a newly independent planet simply uses bonds to buy infrastructure that already exists. In some cases, the district, provincial, or regional government might pay the cost (or part of it) in order to get the originally sponsoring planet out of its affairs. A corporation might pay part of this cost in exchange for title to land (containing valuable minerals) as this will create jobs and tax revenue for the colony.

If a colony achieves independence and seeks Federation membership, it must go through the steps required of any other world, beginning as a probationary member.

CASE STUDIES

Here are three case studies of colonial development. The first one describes an ideal "textbook" case, conducted exactly within FCC parameters. The second and third cases, however, are unusual and interesting, while demonstrating that in a diverse galaxy it is impossible to make everything fit perfectly within bureaucratic expectations.

Case One: New Brazil Colony

Star system 3003-KDF-998 hosts a Federation colony which is called New Brazil. The parent star is a F9V yellow-white main sequence dwarf, similar to Sol but somewhat brighter and hotter. There are nine planets, the fifth of which is Class M.

The system was first scanned by a Star Fleet automated probe in Y139. Following examination of the probe data, the FCC rated the planet as PCC-1 and determined that there was no evidence of sentient life. The planet was rated as "in need of preliminary survey." In Y141, the Federation Galactic Survey Cruiser *Byrd* conducted the preliminary survey and confirmed the findings of the probe: the planet had no sentient native life, and appeared to be a good candidate for colonization, with a strong balance of agricultural and industrial potential.

In Y142, the FCC granted a charter for detailed survey of this world to Oxford University's Galactic Exploration Department. Oxford's exploration vessel *Anthony James Leggett* was dispatched to the system and conducted the detailed survey and analysis of the planet in Y144. This survey confirmed the findings of the probe and the *Byrd*; and the FCC put the planet on the Colonial Allocation List in August, Y146.

By February Y147, four different detailed RCAs had been received.

The Martian Mining and Manufacturing (3M) Corporation wanted to establish a mining colony on the planet, exploiting the relatively rich deposits of gold, platinum, manganese, and iridium on the western continent.

The Orion Sennan-Mothan Cartel presented a proposal very similar to 3M's, wanting to establish a mining and industrial colony.

The Latin American Alliance, a subunit of the United Earth government, proposed establishing a "general colony" on the world, devoted to a balance of agricultural and industrial production and population growth.

The Rigellian Primacy Council suggested establishment of a scientific research facility focused on agricultural products and medicine.

After due deliberation, the FCC accepted the proposal of the Latin American Alliance for the establishment of a general colony under United Earth auspices. LAA dispatched a Pioneer Group to the planet in Y150, and the UE Colonization Authority began recruiting colonists. The planet was named "New Brazil."

Following a successful two-year pioneer phase, 175 Phase I settlers arrived in Y153. Each year brought 20-30 additional colonists, in accordance with FCC guidelines. There was some hardship in the second and third year when a species of local insects attacked crops, but addi-

tional food shipments and the deployment of effective countermeasures solved this problem.

In Y163, the population had grown to about 700 colonists, divided between two settlements and dozens of individual homesteads. At this point, the colony applied for Phase II status with the FCC and this was granted the following year.

New Brazil was at Phase II from Y164 to Y172. New immigrants arrived in large numbers. The outbreak of the General War actually proved to be an economic boon to the colony, as mining and agricultural production operations were rapidly expanded to help cover the shortfall from worlds that had fallen under Coalition occupation. Contracts were signed with outside corporations to expand operations: 3M finally got its mine on the western continent, although it didn't control the colony directly.

By Y225, New Brazil was a Phase III colony with 300,000 inhabitants and a thriving and diverse economy.

Case Two: Rimworld

The Rimworld system was discovered in Y135 by an independent prospector and ship captain named Lucas Morgan, who was searching for dilithium fields perilously close to the limits of the Y102 Border Declaration. Rimworld itself is a Class-M world, orbiting a G2V star. The planet is poor in mineral resources. It is rich however, in agricultural potential.

While initially disappointed in his discovery, the old prospector, perhaps realizing that he was never going to find the "Big One," liquidated the assets he had and decided to settle down. Morgan was something of a crank, with unconventional social ideas and a dislike for the Federation government. He convinced a few like-minded individuals to pool their resources with his. The new "Galactic Rim Agricultural Company" (which was not officially incorporated) then purchased all the automated agricultural machinery it could afford. It also acquired a beaten-up old freighter that was barely warp-capable. The freighter carried their supplies and bulky equipment to the new planet, while the colonists traveled back and forth to "civilization," when necessary, in Morgan's Free Trader *Clementine J.*

The colonists arrived in Y136, and for the next few years scratched out a living on the world's surface. The first three years were extremely tough as the first crops repeatedly failed for no discernible reason. Lucas Morgan was too stubborn to quit, however, and invested the last of the colonists' funds into sending soil and vegetable samples back to Earth for a more detailed analysis than the colony's few scientists could handle. A plant virus was discovered in the soil and researchers were able to introduce a genetically modified antivirus into the ecology.

The FCC got wind of Morgan's activities and asked the Federation Police to investigate in Y139. Morgan's unauthorized colonization was against FCC regulations, of course, and in theory the entire colony should have been removed. But with the Second Federation-Kzinti War raging, and no native sentient life on the planet, the Federation government had other priorities and was too distracted to deal with Morgan's small group as long as the Prime Directive was not being violated. The FCC decided to watch Morgan's group, the local investigator quietly informing Morgan that a proper and well presented RCA could go a long way toward keeping him out of legal trouble.

After the introduction of the antivirus, the colony's fortunes improved quickly. In Y143, the colonists landed their first large contracts providing agricultural goods to Sigma Draconis and Sebelia IV. These contracts made it feasible to add a commercial orbital platform to the colony for the more efficient transfer of bulk cargo. At the same time, Morgan (having the sense to hire good lawyers) wisely presented to the FCC a formal RCA, which was (to his surprise) approved. After the platform was built, the Federation extended to Rimworld status as a Phase II private agricultural colony, although it was required by the FCC that Morgan himself retire from active political leadership. Morgan acquiesced, although he remained a respected community figure. He lived out his remaining years on his farmstead, dying in Y162 at the age of 109.

The colony grew rapidly in the Y140s and Y150s. Most of the colonists were immigrants from Earth, and the planet's population was allowed to vote in United Earth elections beginning in Y156 as part of the United Earth Colonial Territories. At the same time, the 793rd Planetary Defense Battalion, cooperating with the United Earth Defense Organization, was established.

Typical of most National Guard defense battalions, the 793rd was chronically short of operating funds and struggled with obsolete equipment for many years. Because the Federation had literally thousands of agricultural colonies more important to the core worlds, it was not considered worthwhile by Federation defense planners during this time frame to build the heavy defenses typical of older, more established colonies. The colony's proximity to the Romulan Star Empire (and eventually, the newly contacted Gorn Confederation) may also have had something to do with their thinking, as any defenses that survived a Romulan capture would have to be retaken by Federation Marines.

Nevertheless, the 793rd saw action several times over the decades, first against two Orion Pirate raids in Y162 and Y164, then against Romulan privateers in a raid in Y172. After the privateer raid, with the specter of the General War looming, the defenses were given a substantial upgrade. The final configuration with which the 793rd defended Rimworld throughout the war consisted of three defense satellites and a single ground base consisting of a military garrison, a fighter ground base (first equipped with F-4s, then F-16s after Y180), a fusion power reactor station, and a space surveillance station.

Still, the colony's best defense was its remoteness and sheer lack of value as anything other than an agricultural colony. The Romulans sent a dozen small raids against the colony during the General War (which made aces out of several of the local Guard pilots), but never bothered to make a determined effort to capture the colony (which was behind Romulan lines for most of the conflict). One of the Romulan great houses actually traded with the colony, providing various products and supplies in exchange for food

production. Some analysts believe that the Romulans meant to capture the planet eventually, but never got around to it before the Federation began retaking its lost territory. Other analysts contend that the Romulans used the National Guard contingent for practice to test the fighter tactics they would later use against more important Federation installations. Both theories are probably true.

Whatever the reason, the colony's biggest test would come after the General War had ground to a halt. After the cessation of hostilities, the colony was isolated by the Inter-Stellar Concordium during the Pacification Campaign. The ISC believed that the colony had been independent long enough that it should not be "forced" back into the Federation, and the ISC apparently wanted to buy the food production to support locally deployed starships. Then, in Y186, the colony gained some unwelcome attention when one of the initial Andromedan attacks on the Federation targeted the colony. (See ***SFB*** scenario SL223.0.)

Rimworld had probably been singled out by the Andromedans due to one of the factors that had kept it safe during the General War: its remoteness. Only a remarkable string of coincidences, which included a Federation squadron being in the area to "show the flag," a visit by a Gorn squadron on a "good-will tour" of the Federation (Rimworld held a tiny colony of Gorn religious separatists), and a hasty alliance with a Romulan FireHawk, saved the colony from domination by the extra-galactic invaders.

After this attack was repulsed, things returned to normal for a couple of months. The Inter-Stellar Concordium's Pacification Campaign continued, but the colonists were left mostly alone by the peacekeepers. Staying true to their roots, the colonists continued to honor their contracts and ship their agricultural goods to UFP ports.

In late Y186, the Andromedan Invasion exploded against the galaxy and the Inter-Stellar Concordium fleet (what was left of it) was thrown back to their own territory or isolated in small pockets (none of them near Rimworld). Although the Andromedans never again targeted the Rimworld system, the planet did play host for a short time to one of the Federation squadrons deploying to fight with the Gorns and Romulans in Operation Unity.

After the completion of Operation Unity (which destroyed the Andromedan invasion), the colony again sank into obscurity. One can safely assume that the evolution of the colony continued to follow the pattern of steady growth it had enjoyed since its inception. As on thousands of other colony worlds the length and breadth of the Federation, colonists typified by the descendants of Lucas Morgan would not allow otherwise.

Rimworld was researched by Randy O. Green.

Case Three: LTGG

The LTGG system is in the same map hex as Cygnus, about 170 light years toward the galactic southwest. The star is an M5III red giant, which expanded from red dwarf about 100,000 years ago. There is one planet in the system, and four asteroid belts.

LTGG is an abbreviation for "Litterbox-That-Glitters-Gold," a disrespectfully crude translation of a more complex and poetic Kzinti term. The single planet is a Class-E/M world, superterrestrial with a Class-M environment. The climate is rather cold, with 40°F average temperature at the equator, but the atmosphere is oxygen/nitrogen. The gravity is somewhat high at 1.37G. Only high-gravity species (such as the Prellarians) can live there comfortably, but other species could survive. (Most other species live in gravity-controlled colonies and support the space-based asteroid mining industry.)

The planet is primarily agricultural, providing foodstuffs for the rest of the system. The native foods do not taste particularly good and quantities are limited. Even transplanted crops tend to develop strange aftertastes. Klingons and Andorians tend to like the flavor, but other species dislike it. The Prellarians who live on the surface also run some mining operations.

There are rumors of alien artifacts dating from before the expansion of the star. At 1.37G, few adventurers go looking, and the rumors may just be an urban legend. The strongest rumor refers to the existence of a giant "black hole deflector" deep beneath the surface, but most scientists scoff at this and give it the same credence as stories of the Fountain of Youth, Kahless's Sword, Surak's Katra, and so forth.

The asteroid belts are in orbits 2-5, and the interesting thing is that they all appear to be remnants of shattered worlds. This has led scientists to suspect an astronomical influence, probably a near miss by a black hole moving at a sizable percentage of light speed. In any event, the planetary cores have all been reduced to manageable fragments, and the core fragments are almost pure heavy metal and worth a fortune.

The Kzintis controlled the system at the same time they dominated Cygnus. They developed the system for extensive asteroid mining, and built a civilian base station around the Class-E planet. This station stored and shipped resources to Cygnus to feed the industrial base, but was deliberately sabotaged by the Kzintis when they departed in Y135 (having stayed there long after the Federation Border Declaration of Y102, which the Kzintis tried to ignore), leaving chaos in their wake. The planet was on its own until the Second Federation-Kzinti War ended.

The population (150,000) then (Y142) came under indirect Cygnan and Federation control, with a significant Orion presence as well. The population included Kzintis (most of them criminals or political outcasts left behind after the pullout), Cygnans, Orions, Humans, Klingon Subject Races (Dunkars, Cromargs, and Bargantines), Prellarians, and many other species.

The local government was ineffective, however, giving the system a "Wild West" type culture. When Cygnus joined the Federation, LTGG was retroactively recognized by the FCC as a Phase III Industrial Colony sponsored by the Cygnan government. The Cygnan government regarded management of the colony as a major headache, but Orion cartel influence in the system had grown immense, and Cygnan corporations pressured their government to do something about the competition.

LTGG was researched by Gary Plana.

THE COSMOPOLITANS

One of the few homogeneous "cultures" of the Federation is the group known simply as "the Cosmopolitans." These individuals consider themselves Citizens of the Federation, not of any given planet. (Some of these persons still hold legal citizenship on their original planet or some other planet; others hold Federation passports without respect to planetary affiliation and vote in a special non-affiliated voting district).

This class consists of a diverse collection of merchants, academics, journalists, soldiers of fortune, retired military or government employees, children of military or government personnel who did not (or have yet to) follow their parents' line of work, humanitarians, environmentalists, the idle rich, political exiles, retired business people, and others who have chosen to adopt this lifestyle. Not everyone who fits into those categories becomes or considers himself a Cosmopolitan (far from it), but those who do are those who have no reason to tie themselves to a given planet. Cosmopolitans often travel extensively as part of whatever they do for a living (if they do anything at all).

Different planets treat different Cosmopolitans differently. Most are simply treated as individuals, rather than as a member of a type or group. Some are regarded as honored guests, others as annoying visitors who need to be kept under close scrutiny. An honored guest on one planet might be unwelcome on another. Members of the cultural elite of one planet might flock to a cocktail reception for a visiting Cosmopolitan academic, while members of the same planet's business community might regard the same visitor as an "annoying ivory-tower snob."

There is no single "class" for these individuals in the sense of a class-based roleplaying game. Academics might be science specialists or "smart heroes." Merchants might be "charismatic heroes" or members of the "merchant" or "rogue" categories. Soldiers of fortune might be various types of "heroes." Journalists might be "field researchers" or "charismatics" or other types. Environmentalists might also be "charismatics" or "field researchers" or even "heroes."

Orion "slave girls" of the consort class often consider themselves Cosmopolitans. Spies and secret agents sometimes pose as Cosmopolitans (and rogue spies might even *be* Cosmopolitans).

The Cosmopolitans deserve mention because (at least in the minds of the cultural elite) the goal of the Federation is for everyone to become a Cosmopolitan, a citizen of the Federation not an individual whose first loyalty is to a single planet.

In ***GURPS,*** Cosmopolitan characters frequently (but not always) have the following: Advantages: Charisma 1 [5], Xeno-Adaptability [20], and Social Regard (Respected) 5 [25]. Disadvantage: Selfish 6 [-10]. Cosmopolitans also have excellent starting Wealth and Income, as well as very high Reputations, but whether their Reputation as a Cosmopolitan is an Advantage or Disadvantage depends on the specifics of the character's background.

FEDERATION MARSHALS

The Federation Department of Justice employs marshals, a term used to distinguish them from police.

Marshals are Federation government employees, and most (at least those who serve a full career) consider themselves members of the Federation civil service, not citizens of a specific planet. Some marshals are recruited directly out of university, others are recruited from the police or military. Some serve a full career and then retire to a quiet life, others leave after a few years to pursue other careers (often in law enforcement or politics).

Marshals have many duties in the Federation. Some specialize in one or two areas, others move from assignment to assignment over the course of their careers. Some possible duties include:

Guarding prisoners (those held by the Federation Department of Justice or Department of Corrections), in Federation prisons or while being transported from trial to prison or other locations.

Investigation of crimes on the Federation level (crimes defined by the Federation, or crimes involving more than one planet and thus exceeding the jurisdiction of either), including the forging or counterfeiting of Federation currency or other documents.

Guarding certain Federation officials, including members of the Council.

Liaison with the police agencies of member planets, such as providing the local police with information about fugitives thought to be in the area.

Pursuit of interplanetary fugitives.

The most important duty of the Federation Marshals is enforcing the Prime Directive.

Marshals deserve note in a roleplaying game because they might assist (or arrest) members of the adventure group, or the group may itself include Federation marshals.

Federation Marshal

225 points

You are an experienced Federation Marshal with several years of experience under your belt.

Typical Attributes: ST 11 [10]; DX 11 [20]; IQ 12 [40]; HT 12 [20].

Secondary Characteristics: Dmg 1d-1/1d+1; BL 24 lbs; HP 12 [2]; Will 12 [0]; Per 13 [5]; FP 10 [0]; Basic Speed 5.75 [0]; Basic Move 5 [0].

Advantages: Ally Group (The Federation) [24], Fit [5], Higher Purpose (Law enforcement) [5], Legal Enforcement Powers [15], Military Rank 3 [15], Resistant to Disease (+3) [3], Security Clearance 1 [5], Social Regard (Respected) 3 [15], Xeno-Adaptability [20].

Disadvantages: Code of Honor (Obey the Prime Directive) [-5], Duty (Marshal Service) (15 or less) [-15], Sense of Duty (Federation) [-15].

Skills: Beam Weapons/TL (Pistol) DX+1 [2]; Computer Operation/TL IQ [1]; Criminology/TL IQ+2 [8]; Cryptography/TL IQ-2 [1]; Diplomacy IQ [4]; Electronics Operation/TL (Security Systems) IQ [2]; Electronics

continued on page 103.

GEOGRAPHY OF THE FEDERATION

The Federation is defined by the Border Declaration of Y102 as being the territory within 4,750 parsecs of the center of the core region (where the founding members, Earth, Vulcan, Andor, and Rigel were located). The area is a disk, not a sphere, as the Milky Way is about one hex (500 parsecs) thick within the area of the Federation.

The Federation is bounded by the Kzintis (northwest), Klingons (west), Tholians (south), Romulans (east), and Gorns (northeast). (These "directions" are using the arbitrary "up is north" convention of terrestrial maps. This is a matter of convenience for the current audience.)

The map at right is from the ***Federation & Empire*** game, and its four-digit hex numbers are used to identify the location of key planets and other features within the ***Star Fleet Universe.***

The area off the north (top) edge of the map is unoccupied territory, claimed by the Federation, and is the subject of a continuing and energetic campaign of exploration and colonization.

The gray hexes are the Neutral Zone between the Federation and its neighoring empires. The Orion province (2811) is also gray as it was neutral during much of the General War.

The heavier borders inside the Federation denote provinces (see the government section). A province is designated by the upper-left hex number within its border.

The Federation itself is divided into six administrative regions as follows:

Central Region: 2603, 2606, 2609, 2803, 2805, 2807, 2809, 2811, 3104, 3107, 3110.

Southern Region: 2512, 2514, 2813, 2815, 3113, 3116.

Southeastern Region: 3309, 3411, 3413, 3508, 3708, 3711.

Southwestern Region: 2007, 2010, 2207, 2210, 2212, 2408.

Northeastern Region: 3301, 3304, 3306, 3501, 3503, 3505, 3705.

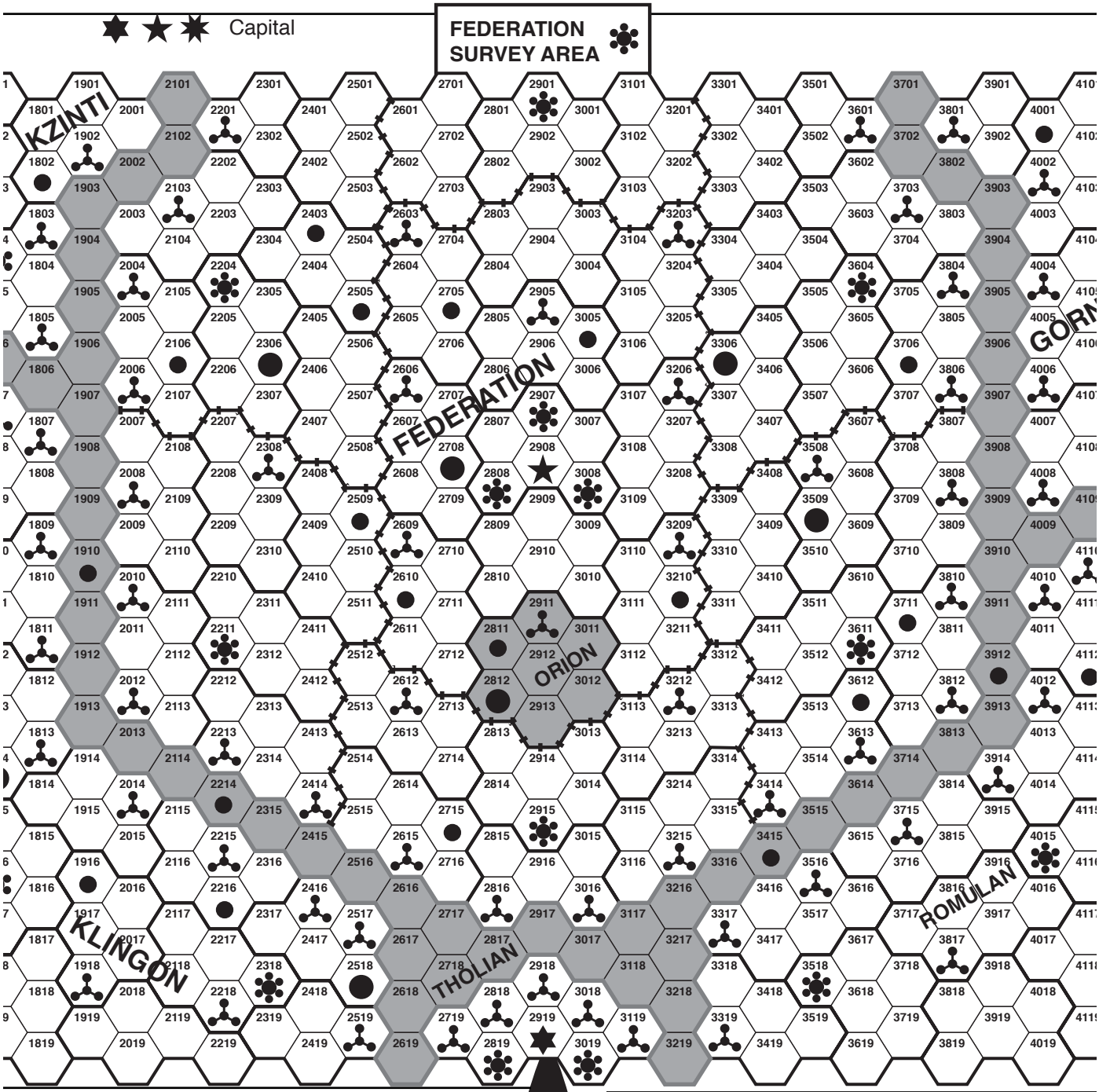
Northwestern Region: 2003, 2004, 2201, 2204, 2304, 2401, 2405.

There is also the Survey Area (which includes provinces 2601, 2801, and 3101), which is administered as a "seventh region" but which has so few inhabitants that it is politically a part of the Central Region.

MAP GAZETTEER

Aberdeen (Federation colony) 3411
Adanerg (Federation colony) 1909
Airsis IV (neutral) 2113
Aliser VI (primitive) 3404
Allen's Planet (Federation colony in Neutral Zone) .. 2002
Alpha Centauri (Federation member) 2908
Alpha Veras IV (pre-spaceflight planet) 2302
Andichron VI (Federation colony) 3309
Andor (Federation member system) 2908
Ankrogea (ancient, dead) 3301
Annox (Federation colony) 2209
Antares (Federation member) 2610
Arcturia (Federation associate member) 2715
Bezwell Index (neutral) 2214
Big Valley V (Federation colony) 2106
Bis'en (Independent feline world) 2806
Blackfoot Pass (Navigational feature, in N.Z.) 1909
Brecolaris (Federation associate member) 3214
Capital District 2908
Cestus (Gorn colony) 4007
Chicago (Federation major colony) 3306
Codimark (Federation minor colony) 2510
Debrock (Federation protectorate) 3514
Deiana (Federation protectorate) 2106
Denebola (neutral) 3415
Diablo Asteroid Field (Orion base) 2106
Dimitris (Kzinti minor industrial world, primary port of trade with the Federation) 1802
Earth-Sol (Federation member) 2908
Fnanla (Independent world) 2604
Fornax (Federation protectorate) 3413
Frallia (Federation associate member) 3201
Gamma Artemis III (primitive world) 3707
Geslok (Gorn minor industrial world, major port for trade with Federation) 4001
Gordan's Planet (Federation planet) 3612
Helvetia (neutral) 3912
Iridima (neutral planet) 1912
Janus VI (Horta homeworld) 2110
Justinia (Romulan minor industrial world, major port for contact with Federation) 4112
K'brogrh (Klingon minor industrial world) 2216
Klegarine (Klingon major industrial world, not on map, primary port of trade with Federation) 1611
Kyprus (Klingon major industrial world) 2518
Leebyahh (neutral, pro-Klingon) 2013
LTTG (Federation colony) 2306
Mad Jack's Hole (pirate sanctuary) 1706
Mantor (Federation associate member) 2206
Meva (Federation planet) 2704
Mezan (Independent planet) 3013
Miktaka (Federation associate member) 2910
Morkedia III (Federation mining colony) 3414
Mynienix (Federation associate member) 3204
Naramar III (Federation minor planet) 3005
New Brazil (Federation colony) 3003
New Marseilles (Federation colony) 3504
Nomea (Federation colony) 2209
Novorosibirsk (Federation minor planet) 2509
Organia (neutral) 1913
Orion (Orion capital planet) 2812
Osiris (Orion minor planet) 2811
Pacifica (Federation major planet) 2708
Paktar (Federation member, Deians) 2505
Pleiades Star Cluster 2011
Pollux IX (Federation minor colony) 2213
Ponderosa IV (Federation colony) 2106
Prelaria (Federation associate member) 2705
Rigel (Federation member system) 2908
Rimworld (Federation colony) 3809
Rita's Planet (Federation colony) 1912
Roon (developing planet) 2805

Scylla-Charybdis (navigational feature) 3506
Sebelia IV (Federation minor planet) 3711
Sentria (primitive) 2803
Sheboygan III (Federation minor planet) 2403
Sherman's Planet (neutral) 1910
Shiloh II (Federation colony) 2106
Shresha-Cygnus (Federation member) 2306
Sigma Draconis (Federation major planet) 3509
Skoleos (Federation planet, Gorn mercenaries) 3704
Southfork IX (Federation colony) 2106
Strongport (Rigel V, Federation major planet) 2908
Taffeland (Federation colony) 2007
Talos IV (Proscribed planet) 3002
Tellarite Prime (Federation associate member) 3706
Tenoria V (primitive planet) 2212
Terdranake-IV (destroyed civilization) 2701
Thetis (Federation colony) 2314
Tyson's Star (disputed) 2315
Valentina III (destroyed civilization) 2110
Vanecheck (disputed) 2315
Vega (Federation colony) 2908
Vereb IV (dangerous civilization) 2903
Vidalia (Federation minor planet) 3210
Vulcan (Federation member system) 2908
Vultrax (Vulcan secondary planet) 2908
Walkuria (Klingon warrior colony, industrial world) ... 1916
Western Worlds (group of five systems) 2106
Yenev'vn (xenophobic dictatorship) 3108
Zeta Reticuli (Old Kings outpost) 2908



Time, the Air Force Tapes, and the *Star Fleet Universe*

The original source materials for the ***Star Fleet Universe*** are records discovered in a United States Air Force computer system in the 1960s. There are tens of thousands of terabytes of information in these tapes, only a fraction of which has been translated. This material forms the basis for the games ***Star Fleet Battles, Federation Commander, Federation & Empire,*** and ***Prime Directive.*** The original TV show *Star Trek* is a literary interpretation of a smaller portion of the same material. Thanks to over 30 years of intense study, the ***SFU*** has delved into much more detail than was possible in the original show.

The raw information found on the tapes has never been released to the general public, only to qualified scholars. As with any field of study, there are different schools of interpretation of this material. There is even a disagreement among experts about what the material actually *is*. The earliest interpretation was that the material was merely a very creative science fiction story. As more and more of the tapes were translated, the sheer richness, internal consistency, and detail of the information made it harder and harder to believe that it was a mere fictional creation, especially when certain aspects of the information (though not all of it) began to "come true" in the real world.

Most scholars now believe that the information was somehow transmitted, via a "time warp," from some point in the future and deposited on the Air Force computer system about the time of a series of unusual events (the details of which are classified). While impossible by any conventional understanding of physics, this information stimulated research by certain government agencies (as part of the military "black budget") into arcane subjects such as time travel, anti-gravity, and space warping. Many researchers believe that much of the UFO phenomenon is a result of a secret government program to develop the very technologies mentioned in the tapes.

Be that as it may, the tapes indicate there are an indeterminate, perhaps infinite, number of parallel continuums similar to, but distinct from, that inhabited by the people reading this article. It is apparent that the ***Star Fleet Universe*** described in the tapes is not our own. It is certainly very similar to it, up until approximately 1960, but the history of the ***SFU*** began to diverge from "ours" from that point, particularly with the Space Race between the United States and the Soviet Union.

Not everything was different. Yuri Gagarin was the first man in space in both universes and Neil Armstrong was the first man on the moon, but the ***SFU*** Space Race was apparently more intense, and more militaristic, than that experienced in our own timeline. Both sides in the ***SFU*** Cold War invested far more money in space technology (and science in general) than in our history. The ***SFU*** Space Race did not cool down once the United States landed on the moon; indeed, it accelerated as the USSR frantically tried to keep pace. As a result, the ***SFU*** saw development of many technologies abandoned in our own universe. This included orbital nuclear-weapon platforms in the 1960s, nuclear-rocket engines in the 1970s, and primitive interplanetary spacecraft in the 1990s. Advances in genetic engineering, computer science, and cryogenic technology were also more rapid in the ***SFU*** continuum than our own, resulting in a very divergent timeline from ours by about 1990.

Much of the information on the tapes regarding the history of the ***SFU*** in the late 20th and 21st centuries is fragmentary and incomplete. It is apparent that there was a series of global conflicts, beginning with the so-called "Eugenics War" in the 1990s and ending with a limited nuclear exchange sometime around the mid 21st century. The history of the ***SFU*** following First Contact and the formation of the Federation is given in much greater detail elsewhere in this book. Ironically, as the amount of detail available on the tapes increases, exactly *when* these future events occur becomes less and less clear.

The data in the Air Force tapes uses at least a dozen different calendar systems, and there is no "Rosetta Stone" to correlate them. Three different Earth-derived calendars are used. Much information is also given using Vulcan, Rigellian, Cygnan, Klingon, and Romulan calendars, but without any direct way to translate these into Earth equivalents. Some of the material references vague "stardates," but how these stardates are derived is never made clear, and scholars have been unable to reverse-engineer the calculation. The vast majority of the material references the so-called Y-calendar, dating from the First Contact between Humans and Vulcans. The Y-Calendar was apparently the official calendar used by the United Federation of Planets. But unfortunately the tapes do not tell us exactly how the Y-calendar relates to our own A.D. calendar.

In some cases, traditional A.D. dates are given in the tapes, but many of them directly contradict each other. First Contact between Vulcan and Humans is dated in 2063 A.D. in some documents, and in 2400 A.D. on others. Some scholars believe this is due to data corruption from a garbled transmission. Others think that perhaps the tapes themselves contain information from *several* divergent, but related, timelines. No one is sure how long a "Y-year" is.

Scholars have coalesced around three different schools of thought regarding the relation of Y-dates and A.D. dates. The "Amin Audeh Chronology," concentrating on the literary and cultural aspects of the tapes, places First Contact (between Humans and Vulcans, i.e., Y1) in 2063 A.D. and the Klingon invasion of the Federation around 2281 A.D. The "Valkenburg Chronology," concentrating on the military and technological data, arbitrarily places First Contact in 2400 A.D., and the Klingon Invasion around 2571 A.D. The third school of thought says that the entire problem is unsolvable, and simply uses the Federation's own Y-calendar when studying the tapes, without trying to convert this into A.D. equivalents.

The bottom line is that no one is precisely sure when the events in the ***SFU*** occurred, or rather "will" occur. It is apparent that our own history will develop differently than in the ***SFU.*** Hopefully, mankind's long-term future will be as bright in our own continuum as it is in the ***SFU.***

The Federation Express Corporation

The Federation Express Corporation is something unique in the ***Star Fleet Universe.*** It is a successful for-profit civilian business that services all manner of customers, from farmers on isolated agricultural colony worlds to major empires that span thousands of star systems.

A Lot of Addresses

The United Federation of Planets has (as of Y168) some 278 districts (with at least 1,000 "usable" planets each). Not all of these *are* occupied, but when you add asteroid mining stations and environmentally enclosed stations on inhospitable planets, it remains a huge number. (The Federation lists over 180,000 inhabited locations.)

The United Federation of Planets, by charter, must service all "members" and all 180,000 locations equally, but the Federation Express Corporation merely agrees to deliver such goods that a paying customer turns over to a Federation Express office for delivery. In some less profitable areas, Federation Express Corporation turns over shipments to local freight systems that are often subsidized by the local government.

The economic advantage that the Federation Express Corporation has is also based on demographics. Some 27% of the UFP's population is located in the capital district. Another 29% is located in just 18 more districts (13 minor worlds and five major worlds). Another 38% of the population is within a thousand light years of one of the planets listed above, or an established military base. The remaining 6% are serviced by local companies (they are not profitable for Federation Express).

The Sixth Largest Fleet

Most observers, when they see a Federation Express courier ship "screaming through space" assume that they are seeing the Federation Express Company. This is not true. The 160 FDX courier ships are just 10% of the company's total fleet, which also includes over 100 long-haul freighters, plus another 1,000 Priority Transports and Free Traders, along with no end of shuttles, skiffs, and other craft. Over 100 terminals receive, sort, and transship the cargo consigned to Federation Express.

There are well over 100,000 storefront Federation Express offices located on star bases, other bases, member worlds, other planets, and small colonies scattered across the quadrant. Federation Express also places shipments on thousands of freighters going to various destinations where they will be handed back to other Federation Express franchises.

There are many other freight-hauling companies in Federation space, but most are either long-haul freighters handling bulk commodities, or small companies with a few ships that operate in a limited area. The Federation Express Corporation (at least after it bought Universal Parcel Systems in Y152) is the only Federation-wide company handling smaller shipments. (The Federation Postal Union handles mail via subspace and leaves the packages, pallets, and "truck-load lots" to Federation Express and other companies, or to Star Fleet.)

The Corporate Culture

Federation Express Corporation has thousands of stockholders, including individuals, companies, pension funds, and governments. Taken altogether, the Federation Express Corporation ranks as the sixth largest fleet of ships, exceeded only by the Federation, Klingon Empire, Romulan Empire, Lyran Empire, and ISC (in each case counting warships, auxiliaries, and police ships). Astonishingly, the Federation Express Fleet exceeds those of the Kzintis, Gorns, Hydrans, Tholians, WYNs, and Orions.

The Federation Express Corporation defines success as satisfying the customer with superior service. That design is actually the secret to the success of the company in that it can then avoid having to build and maintain the kind of redundant systems that governments are forced to have. The Federation Express solution was to devote its infrastructure to servicing the major populations first, and provide a capacity to deliver the goods, services, and passengers on an "as needed" basis.

Moving the Freight

There is no such thing as a "typical" Federation Express location. Some are no more than a single clerk working a kiosk on busy passenger-terminal concourse on a populated planet. Others operate dozens of shuttles that spend their time picking up and delivering cargo, shipments, and parcels in large cities, or over a single continent or even (depending on the planet) planet wide. (A few of these handle passengers.) Still other locations use shuttles and skiffs to service a number of colonies, mining bases, research stations, and settlements within a few light years.

The headquarters of the Federation Express Corporation is on Xena, a small planet orbiting Sol (the same star as Earth, but Xena is four times as far away as Pluto). For all practical purposes, the Corporation owns this "dwarf planet" outright. It started as the main distribution terminal for all shipments to and from Earth, and eventually for the entire capital district. It is now the central terminus of the entire Federation Express system, and virtually anything from the Romulan or Gorn border goes through this terminal on the way to the Klingon or Kzinti borders (and vice versa). Over time, Federation Express built its own repair and refit yards on this planet (and a dozen others) and the planet had a population of over 1 million by Y168.

The corporation's ships are built in many commercial yards. The Vulcan firm of Suuvinalis Warp Engines has built over two-thirds of the FDX ship type.

The FDX-class ships travel between the largest planets including, in peacetime, planets in Klingon, Romulan, Gorn, Kzinti, Lyran, and Hydran space. (The corporation strictly avoids reporting what its crews see in foreign ports to the Federation's GIA.) High-priority cargo is delivered to terminals within a thousand light years of the destination, at which point priority transports or traders take it the final distance. Only the most important planets get direct delivery by FDX ships. Over two-thirds of the cargo consigned to Federation Express is carried by fast long-haul freighters (with military-grade engines) from one terminal to another. This takes 30% longer but costs 50% as much.

PLANETARY SURVEY

PLANETS OF THE FEDERATION

The United Federation of Planets is an "empire" like no other in the ***Star Fleet Universe,*** and several factors have combined to make it so.

First, the Federation is the only true multi-species empire. Unlike the Gorns (who have no other species in their territory), or the Kzintis (who treat any inhabited planets in their space as quarantined dependencies), or even the Klingons (who allow the various species to live and serve off planet, but only subject to the rule of the Imperial Race), the Federation is a true multi-species nation, where all inhabited planets deserve equal respect, and have the opportunity to join the Federation and (over time) become the equal of every other planet in it. The Federation is also unique in that it leaves low-technology planets alone to develop naturally, introducing them to the community of planets only when they build warp-driven spacecraft.

Second, the Federation is the largest of the empires, having more territory than the empires of the Klingons or Romulans. It is much larger than the Gorn Confederation, or the Kzinti Hegemony. The Federation truly dwarfs the Tholian Holdfast.

Third, being a free-market multiparty democracy with an independent judiciary and a fair and balanced press, the Federation economy is expanding at a speed other empires could only dream of. Anyone with a new idea can put it on the market and, if it's a good idea, cash in.

Fourth, and perhaps most important, the Federation expanded both from the center outward and from the outer edge inward, and it did so simultaneously. Other empires expanded from a central core, and held whatever territory they could seize and defend; the Federation (alone of all empires) declared its outer border as an arbitrary distance, and by the power of its economy and Star Fleet, made the Border Declaration of Y102 stick. Other empires were forced to accept it.

This meant that while the military built a chain of bases along the border (encouraging member planets and business corporations to found colonies there, in order to serve the market created by the military presence), civilians continued their original expansion from the center into vast areas that were indisputably under Federation control but had in fact never been explored. The borders of other empires are where they are because that was how far they had explored and colonized when they met another empire, but the Federation is continually expanding into areas it does not have to fight for. Anyone can charter a unarmed spaceship and go looking for likely planets on which to found a colony. And many, many do exactly that.

TYPES OF PLANETS

As the list of planet types shows, there are many kinds of planets, from airless moons to gas giants, from frozen iceballs to planets shrouded in toxic gasses. The highly desirable Class-M planets (and similar Class-K, Class-L, and Class-N planets that can be inhabited by humanoids without using sealed colonies and artificial biospheres) are only a small percentage of the occupied planets. Many of those airless moons and toxic planets have valuable resources that can be recovered with enough effort. Terraforming is possible, but takes decades, only works in certain cases, and sometimes does not work at all.

ENTERING THE FEDERATION

Entering the United Federation of Planets as a tourist, merchant, or immigrant is easier than for any other empire. Being a democracy, the Federation lives by the principle of "innocent until proven guilty." Until a visitor proves himself to be a spy, saboteur, criminal, or invader, entry is not forbidden. (Those who are "strongly suspected" may face serious travel restrictions, and of course, no one, not even a Federation citizen, can enter private property or a military security zone without some kind of authorization.)

Given its free press and open attitudes, the Federation gives away information about its various planets that other empires regard as state secrets. While the Federation knew little about the Romulan Empire and was confused for decades about which planet was the Klingon capital, foreigners can simply buy an atlas of the Federation in any bookstore and know the Federation to a level of detail that Star Fleet never knew about other empires.

Legal entry into the Federation is a simple matter of presenting a passport or other accepted identification documents and applying for a visa. (A visa isn't even necessary for most colonies near foreign borders, but is required for the member worlds in the interior.) Unlike other empires, unannounced visitors can apply for entry upon arrival, rather than weeks in advance as is required to enter the Klingon or Romulan empires.

Routine medical checks are conducted at the passport desks at major spaceports without the visitor even being directly aware it is being done. (The same scans suffice to detect weapons and contraband products.)

Member planets and major colonies have further arrival controls, document checks, and even lists of "excluded individuals." These controls apply not just to foreigners but to citizens of other Federation planets. Arriving travelers are granted entry for defined periods (usually about a month) and must reapply to remain longer.

Capital District

The core of the Federation is located in an area about 500 parsecs across, corresponding to ***F&E*** hex 2908. This region is the economic and political heart of the UFP, including member worlds Earth, Mars, Alpha Centauri, Vulcan, Andor, Rigel, and many important colony worlds.

The Sol system includes Earth, capital of the Federation, as well as the major industrial planet Mars. The minor industrial world Luna is a satellite of Earth.

The Alpha Centauri system (4.3 light years from Sol) contains the minor industrial world Alpha Centauri III (called Culden-Feyr by its natives).

The Andor system (Epsilon Indi, 11.8 light years from Sol) includes the major industrial worlds Andor and Sapphirex, and minor industrial worlds Dhowkreen and Zhukarak.

The Vulcan system (40 Eridani 3, 16 light years from Sol) contains Vulcan and the minor industrial planet Vultrax.

The Rigel system (770 light years from Sol) includes major industrial worlds Rigel and Strongport, plus minor industrial worlds Thell'naar, Yee'laa, and Filii'lon.

Capital District: Sol System

Star Class: Sol (G2V, yellow-white star, 1.00 stellar mass).

Planets

The planets and moons of the Sol system are under control of United Earth, with the exception of Mars (and its two moons), which is politically independent and has its own representatives in the Federation government.

I. Mercury: Class-I hot rock. Mercury is home to several large mining facilities along the equator, plus Star Fleet Academy training stations at both poles. Total population: about 1 million.

II. Venus: Class-C hothouse. Venus is a twin to Earth in some ways, but the thick carbon dioxide atmosphere has led to a runaway greenhouse effect and a blistering hot environment. Star Fleet Academy maintains a "hostile environment" training facility at the south pole, and there are several domed research and mining stations. Some of these research facilities are studying ways to terraform the planet into a more livable environment. Total population: 165,000.

III. Earth and Luna: See the planetary survey.

IV. Mars: See the planetary survey.

Asteroid Belt: There is an asteroid belt between the orbits of Mars and Jupiter. Thousands of these asteroids are mined for minerals, and there are two large space stations that serve as processing facilities. The population of the asteroid belt and bases varies considerably over time, but is usually around 1 million.

V. Jupiter: Class-A hot gas giant. Jupiter has 17 large moons, and dozens of smaller moonlets. One moon, Europa, has a subsurface liquid water ocean and non-sentient native life forms. Europa is considered a "nature preserve" jointly managed by the United Earth and Martian governments, and is off-limits to exploration and exploitation. The other large Jovian moons support mining operations and research facilities. Two of these moons, Io and Ganymede, have large colonies. The mining facilities on Io (population 900,000) are quite productive, but also rather dangerous given the high background radiation level, extensive volcanism, and "wild frontier" culture of that moon. Ganymede (population 1.8 million) features a thriving spaceport called Kirbuk City (named for the commander of the first successful manned Jupiter mission) that serves as a central shipping hub for vessels transporting resources to Earth, Luna, and Mars. Kirbuk City also serves as the administrative center for Jupiter and its moons. The total population of Jupiter's moons and orbital habitats is approximately 125 million.

VI. Saturn: Class-A hot gas giant. Saturn has seven large moons, dozens of smaller moonlets, and an extensive ring system. The large moon, Titan, has an extensive population (in excess of 3 million in Y160) living in sealed domes, the economy devoted to mining and materials research. Serving as a central hub for shipment of minerals mined from the various moons and moonlets, a large civilian space station called Christopher Point orbits Saturn. The administrative center for Saturn and its moons is also located aboard Christopher Point. The total population of Saturn's moons and habitats is approximately 97 million. The social culture of Saturn is extremely liberal by traditional human standards, particularly in terms of family structure and sexual mores. Line and group marriages are commonplace, and individuals who feel constrained by "traditional values" in expressing their affections often find a friendly environment on Saturn.

VII. Uranus: Class-B cold gas giant. The planet has five large moons and at least 20 smaller moonlets. The largest community is a domed Federation research facility on the moon Oberon. The total population of all colonies and habitats is about 4 million.

VIII. Neptune: Class-B cold gas giant. Neptune has one large satellite called Triton, plus several smaller moonlets. A domed, luxury resort on Triton, catering to the rich and famous, is the center of the Neptunian economy. Total population: about 3 million.

Important Kuiper Belt Objects

IX. Pluto/Charon: These are Class-Q dwarf planet iceballs, orbiting a common center of mass. Traditionally, Charon was considered a moon of Pluto and this has remained true in vernacular speech, although it is not technically true in an astronomical sense. There is a Star Fleet Academy training facility at Pluto, along with a research station on Charon.

X. Xena: This dwarf planet is home to a huge Federation Express shipping base.

XI. Other: Large Kuiper Belt objects Quaoar and Sedna, along with dozens of other Kuiper Belt denizens, are home to stations extracting gasses for industrial use.

Total population for Pluto/Charon, Xena, and the Kuiper Belt is approximately 2 million, more than half of them on Xena.

Planetary Survey: Earth

I. GENERAL INFORMATION

Status: Homeworld of the Humans, Capital of the United Federation of Planets.
Location: Coordinates 2908, Federation.
Mass: 5.382 x 10^{21} metric tons.
Density: 5.5.
Diameter: 7,927 miles.
Class: M.
Surface Area: 197 million square miles.
Land Area: 57 million square miles.
Land Area as Percentage of the Surface: 29%.
Surface Gravity: 1.00G.
Mean Surface Temperature: 72°F.
Surface Pressure at Sea Level: 1.00.
Atmosphere Composition: Nitrogen: 77%.
Oxygen: 21%.
Argon: 1%.
Trace Gasses: 1%.
Pollution: Mild to moderate in industrial areas.
Orbital Distance: 93 million miles (1.00 AU).
Day: 23 hours, 56 minutes.
Year: 365.25 local days.
Axial Tilt: 23°.
Population: 7 billion.

II. BIOSPHERE

Earth is a typical Class-M world, rich agriculturally and blessed with significant natural resources, although it lacks deposits of certain important strategic substances such as dilithium, topaline, and pergium. The climate is quite diverse even by Class-M standards, and the biosphere supports myriad plant, insect, and animal species. Humans are the dominant life form. The biosphere has recovered from the effects of industrial pollution and global warfare that plagued humanity in the decades before First Contact, although some native species (particularly certain marine mammals that would have qualified as sentient under UFP standards) tragically went extinct during this period.

The planet has one Class-D natural satellite called Luna. Luna is home to 825 million colonists, living in orbital communities, surface pressure domes, and extensive underground habitats. The thriving Lunar economy is centered on industrial manufacturing, plus several important research facilities in the domed capital Armstrong City. Luna's economy is so productive that the moon rates as a minor industrial world equivalent to many much larger planets in the galaxy. Luna is closely tied to Earth socially, economically, and politically, and is considered a "regional confederation" under the United Earth government (see below). Luna University has become the most respected civilian human learning institution in the Federation, exceeding even the great historic universities of Earth itself. Star Fleet Academy's Prime Central facility, the main training location for the elite Prime Teams, is also located on Luna, making this world one of the Federation's main centers of learning and knowledge.

PROFILE

Humans are bipedal mammals with two sexes. With proper nutrition and medical care, humans in the time period of ***Prime Directive*** have an average lifespan of 100 years, with some individuals reaching ages as high as 140.

Humans are the most numerous species in Federation space and probably the most adaptable. This, and their strong tradition of innovation and cooperation, has brought the species to the forefront of interstellar politics.

Human

0 points

Most humans will add Federation Standard as a language skill in addition to their native language.

III. HISTORY OF EARTH

Genetic studies and fossil evidence show that humans are native to Earth, evolving from a precursor species of primate over hundreds of thousands of years. There is, however, evidence that Earth was visited in the distant past by extraterrestrials, who took primitive humans and "seeded" them on other worlds throughout this part of the Milky Way Galaxy. For more information on this fascinating topic, see *Mysteries of the Federation* on p. 138.

Like many sentient species, Earth humans fought wars among themselves, gradually progressing through the Stone, Bronze, and Iron ages. Empires rose and fell; societies grew, prospered, stagnated, and collapsed, then grew again. Technology gradually improved, with humans reaching TL5 and the Industrial Revolution early in the 18th century on the old Earth calendar.

This greatly accelerated the technological and economic progress of humanity. Social advancement also quickened in this period. But mankind's technological progress clearly outpaced his social development by the beginning of the 20th century.

In their groundbreaking Y105 magnum opus *The Cultural Development of Sentient Species,* researchers Hodgkin and Richter describe such a developmental dichotomy as a "techno-social maturation crisis." Many cultures throughout the Milky Way Galaxy have badly damaged or destroying themselves through nuclear or biological war during such a crisis. According to Hodgkin and Richter, mankind's version of this crisis began with the First World War, a devastating conflict fought with TL5-6 technology. This war was a mere precursor to what followed over the next 140 years.

Technological progress was extremely rapid during this period, particularly following the development of atomic energy at the end of the Second World War. Fortunately, a full-scale, civilization-destroying nuclear exchange between the major superpowers was avoided during the "Cold War" period in the late 20th century. But humanity was still rocked by damaging conventional wars over ancient issues such as religion, as well as new issues such as genetic engineering and selective breeding to "improve" the species. At one point, an attempt by a group of alleged "supermen" to seize world power was stopped, albeit at great cost. A United Nations military force, led by American General Colin Powell (holding the temporary rank of U.N. Field Marshal) destroyed the last bastion of the supermen in 1996. Unfortunately, hopes that this victory could lead to planetary unity were misplaced.

Not everything was grim. Gigantic progress was made in the fields of medical research and computer technology. Primitive, fission-powered interplanetary spacecraft were built in small numbers. Manned missions to Mars, Jupiter, and Saturn were launched. North America and Western Europe made halting but significant strides toward economic and political integration. But the "techno-social maturation crisis" came to a head in the mid-21st century.

Records are fragmentary. But it is known that the final crisis began when the most powerful nation-state on the planet, the United States of America, was crippled by a series of damaging volcanic eruptions in the Cascade Mountains and devastating earthquakes in California and the Midwest. Other important countries such as Indonesia, Italy, and Japan were also severely impacted by a worldwide increase in volcanism. Excess volcanic ash in the atmosphere, along with global warming at least partially caused by industrial gasses, made the world climate increasingly chaotic, causing an upsurge in extreme weather events. The climate disruption reduced agricultural output, threatening millions with starvation. Wars over control of religious sites, fresh water, and hydrocarbon resources devastated the important Middle East region.

The resulting turmoil provided fertile ground for the growth of totalitarian Neo-Communist and Neo-Fascist ideologies, leading to new dictators and political extremists such as Piotr Volkov, Ahmad Parvaresh, Lee Kuan, Ferris, and Green. Volkov was the first of the "new tyrants" to come to power, narrowly winning election as President of the Russian Federation on a platform calling for the revival of the old Soviet Empire and a direct challenge to "Western arrogance." An alliance between Russia, China, and Iran followed, dramatically ramping up tensions with the West.

Democracy was threatened from within in North America and Western Europe. Political unrest and economic chaos fractured long-standing systems. Elections in the remaining democratic nations tended to swing between extremes of right and left, enabling fanatics on both sides of the political divide to build strong power bases.

Cooler heads attempted to put the brake on the slide into conflict, but to little avail. An attempt to reform the floundering United Nations into an actual world government ended in complete failure, accelerating the slide into war.

Eventually, a nuclear exchange between the major powers destroyed many cities and killed nearly a billion people. The war was "limited" in scope, as the belligerents backed away from all-out launch of their complete arsenals at the last second. However, the environmental and economic devastation was nevertheless severe. A ceasefire was declared, but chaos reigned in many areas. It helped matters somewhat that the worst of the tyrants destroyed themselves in the war or were overthrown by their own peoples shortly afterward. But international relations remained very strained. Distrust was rampant. Rebuilding efforts proved difficult, and the future was quite uncertain. Many feared that Earth was entering a new dark age.

A new age soon dawned; fortunately for humanity it was not a dark one.

Building on the theoretical foundations earlier established by physicists such as Alcubierre, Bacher, and Kazanga, the brilliant engineer Zefram Cochrane and his research team developed a primitive warp drive in the years immediately following the Third World War. A passing Vulcan survey ship noticed the first flight of Cochrane's prototype vessel, leading to First Contact and the opening up of the galaxy to humanity.

Access to new resources on a galactic scale helped Earth recover from the chaos of the war. Imported Vulcan technology was of great use in repairing environmental

damage and restoring infrastructure. New colonies were established on Luna, Mars, and planets in other solar systems. This provided a "relief valve" for social pressure and a new frontier for development.

Much as Western Europeans developed a distaste for warfare after the events of the first and second world wars, humanity as a whole proved more willing to cooperate, despite ethnic and religious differences, following the world-wide devastation of the third one. Cultural differences weren't exactly forgotten, but were (for the most part) set aside as humanity moved out into the galaxy.

Not everyone reacted well to exposure to extraterrestrial life. "Earth for Earthmen" was a popular political slogan in the more xenophobic regions. But for most humans, the benefits of opening up to the galaxy so clearly outweighed the risks that the "purists" were a definite, if loud, minority. Most human leaders soon realized that Earth must present a unified face to the rest of the galaxy, if it wanted to avoid being dominated by other species.

After intense negotiations, the Pax Terra Treaty established the government of United Earth. It took several decades before all of the remaining nation-states accepted the terms of Pax Terra. But the dream of a unified humanity, after the false starts of the League of Nations and the United Nations, was eventually achieved in United Earth.

Earth quickly became a leading voice in galactic affairs. Humans and Vulcans took the lead in the founding of the United Federation of Planets. See the Federation history section for further details.

IV. CULTURE OF EARTH

Government: The United Earth government is a parliamentary democracy. Earth is divided into 12 "regional confederations." These are:

The United Americas (the United States of America, Canada, Mexico, Cuba, Caribbean islands)

The Latin American Alliance (the other nations of Central and South America)

The Eurasian Union (Western, Central, and parts of Eastern Europe)

The Federation of Independent States (Russia, portions of Eastern Europe and Central Asia)

The Levant League (North Africa, Israel, Arab and Middle Eastern nations eastward through Iran)

The United States of Africa (Africa south of the Sahara Desert)

The Central Asian Confederation (India, Pakistan, portions of Central Asia and Southeast Asia, Malaya, Singapore)

The East Asian Confederation (China, Korea, Vietnam, Laos, Indonesia)

The Pacific-Asian Union (Japan, the Philippines, Australia, New Zealand, the island nations of Micronesia)

Luna

The United Solar Territories (other planets of Sol except Mars, including all space stations and asteroid bases not directly controlled by the Federation government)

United Earth Colonial Territories (extra-solar Earth colonies which have yet to achieve independence and separate Federation membership)

There were nine regional confederations, with Luna, Mars, and the other planets without direct representation in the UE government. Mars declared independence in Y36, resulting in a political crisis (see the Mars planetary survey). Luna was granted status as a regional confederation in Y38 to prevent a similar crisis, with the Solar Territories following in Y49 and the Colonial Territories in Y65.

Elections to the United Earth World Congress are held once every six years (two regions per year). Each regional confederation has one representative in Congress for every 10 million citizens. A confederation with 550 million citizens, for example, has 55 representatives in the World Congress. Voting is conducted by party list: voters vote for a party, which is then reflected in party control of that number of congressional seats from that region. For example, if the Federalists received 35% of the vote in the United Americas, they would control 35% of that region's World Congress seats for the next six years.

The World Congress selects a Prime Minister who acts as both head of government and head of state. By law, no one individual can hold the post of Prime Minister for more than six years during his lifetime. Also by law, the prime ministership rotates between regional confederations, to prevent one region from dominating the position.

Each regional confederation is divided into further subunits corresponding closely with old nation-state boundaries, preserving (in most cases) ancient political and cultural traditions. The United States of America, for example, still exists as a subunit of the United Americas. Texas and Iowa still exist as subunits of the United States. Japan is a subunit of the Pacific-Asian Union; Yamagata Prefecture still exists as a subunit of Japan.

The offices of President of the United States, Chancellor of Germany, and Prime Minister of Sweden still exist. The exact political structure of each regional confederation and related subunits varies, but the devotion to human rights and freedom of conscience is world-wide. For more details about how politics works on United Earth (and the Federation at large), see the political history section on p. 13.

The United Earth Defense Organization (UEDOR), more commonly known as the "Earth National Guard," controls system defenses for Sol and many other Earth-human colonies within the Federation. The United Earth Space Probe Agency (UESPA) operates dozens of small science probe vessels conducting research and survey missions, exploring planets considered for colonization. This is often in close cooperation with the Federation Star Fleet. Star Fleet ships are occasionally "loaned" out to UESPA (and similar agencies from other Federation worlds) for research missions in solar systems considered for development by Earth corporations or institutions.

Society: Extremely diverse. The heterogeneity of human society is a source of great strength, but also led to innumerable conflicts over ethnic, political, social, and religious matters for thousands of years. These issues have eased

greatly since First Contact. As humanity became aware of its true place within the cosmos, most humans accepted and appreciated their own diversity more readily. There are a wide variety of relationships, family structures, and marriage customs.

Human society is not quite utopia; ethnic, social, and religious differences still exist. But conflicts (at least between large groups) are resolved peacefully now. Having thousands of planets available for colonization helps; individuals or groups who simply can't get along with their fellow humans peacefully, or who wish to experiment with different forms of social organization, can emigrate to a colony world where they are more culturally comfortable.

Economy: The human economy is extremely dynamic, thanks to its entrepreneurial spirit as well as the natural resources of the Sol system and hundreds of Earth colonies in the Federation. The economy is free-market capitalist in orientation, though with a significant public-service sector that provides free education and health care for all citizens. See *Economics* on p. 25.

Laws: Generally administered and enforced at the local level, laws vary in detail from locality to locality, but all must be in accord with Federation Charter and the United Earth Constitution. These documents guarantee freedom of speech, religion, assembly, privacy, and "freedom of the person" from arbitrary government action. For more details, see the *Federation Justice* section on p. 27.

Religion: Like everything else in human society, religion is a complex and diverse topic. Many humans are agnostic or atheist, but there are billions of believers in a spiritual reality of some sort. About 30% of humans living on Earth lack spiritual or religious orientation, but the percentage of believers is higher on Mars and many colony worlds.

The major religions of Christianity and Islam share a common Abrahamic monotheistic root with the older religion of Judaism. Other religions such as Hinduism and Buddhism also have billions of adherents. In general, the more moderate, open, and "mystical" variants of the major religions have done well over the last few centuries, while the more fundamentalist versions have lost adherents. Conservatives of all religions found that it became very difficult to maintain a literal interpretation of scripture after First Contact.

There are an untold number of variants within the major religious groupings, some of which have grown rapidly over the last two centuries. Important examples of sects which have seen growth include Mormonism, Bahai, and Neo-Sufism. Examples of smaller but still important religious movements include, but are not limited to, Neo-Paganism, Neo-Transcendentalism, and Reformed Scientology. There are also a small but growing number of human converts to non-human religions. For example, the Orion religion of the Goddess Ethene has seen explosive growth among humans in recent decades.

One particularly interesting recent human religious development is the Syncretic Mystic-Unist Church. Established on Luna in Y47, SYMIC focuses on the commonality of spiritual ideas and mystical experience among most sentient species. "Symicts," as adherents are known, seek to develop and explore a so-called "perennial philosophy" that most sentient species supposedly relate to on one level or another, eventually leading toward a "universal" understanding of "The One." The number of human Symicts is small but growing quickly; the religion is also growing rapidly on Alpha Centauri and Rigel. There are also a surprisingly large number of Symicts in Star Fleet.

Planetary Survey: Mars

I. GENERAL INFORMATION

Status: Homeworld of the Martians (humans born on Mars).
Location: Coordinates 2908, Federation.
Mass: 5.79 x 10^{20} metric tons.
Density: 3.9.
Diameter: 4,228 miles.
Class: K (terraformed Class G).
Surface Area: 56 million square miles.
Land Area: 46 million square miles.
Land Area as Percentage of the Surface: 82%.
Surface Gravity: 0.376G.
Mean Surface Temperature: 37°F.
Surface Pressure at Sea Level: 0.52.
Atmosphere Composition in Y175: Nitrogen: 74%.
Oxygen: 15%.
Carbon Dioxide: 3%.
Trace Gasses: 8%.
Pollution: Light in industrial areas.
Orbital Distance: 230 million miles (1.5 AU).
Day: 24 hours, 39 minutes.
Year: 687 local days (687 Earth days, 1.88 Earth years).
Axial Tilt: 25°.
Population: 980 million.

II. BIOSPHERE

Mars in the distant past was quite similar to Earth, with freestanding water and primitive native microbial life. But the planet is much smaller than Earth, and over time the weaker gravity field allowed most of the atmosphere to leak into space. By the time humans achieved spaceflight, Mars had been a Class-G cold/dry desert world for millions of years.

Since colonization, Mars has been terraformed into a Class-K environment. Water from directed-comet impacts has created shallow seas. Genetically engineered algae and plant life, along with mechanical atmospheric processors (originally imported from Vulcan and Rigel), gradually thicken and oxygenate the atmosphere. During the time period of ***Prime Directive,*** the atmosphere was approaching Earth standard in composition, but was still too thin for humans to breathe without a respirator in most areas. Colonists still live in sealed domes and underground habitats. It was estimated that the environment will be fully Class M by Y250, although the weak planetary gravity means that artificial means must be used to keep the planet's new atmosphere from leaking off into space over time.

III. HISTORY OF MARS

Humans visited Mars during the space race period, but serious colonization efforts did not begin until after First Contact. The first large settlement was established by the European Space Agency in Y9. The initial wave of settlers came mostly from France and Scotland, provinces with large refugee populations who had fled areas of Earth damaged in the last wars. When ESA merged with NASA, the Russian Space Agency, and other organizations to form United Earth's UESPA in Y15, the "Martian Frontier" was opened to immigrants of all nations.

The private Martian Colonization Authority was chartered by the UE government to manage colonial affairs, somewhat akin to the "company" system of world colonization by the European powers in the 17th and 18th centuries on Earth. The MCA provided large bonuses for new immigrants and heavy incentives for corporate investment in the new world.

The population grew rapidly. But at times, it seemed the MCA was more concerned with protecting the investments of large institutions and companies than with the rights of individuals. There was also social conflict between "techs," who wanted to aggressively terraform the planet, and "enviros," who wanted Mars left in its natural state. Local government was weak and unable to resolve these issues. Although officially citizens of United Earth, Martians were without direct representation in the UE World Congress.

By the late Y20s, following a serious industrial accident that cost the lives of over 100 colonists, the Martians began agitating for greater political protection and recognition as a "regional confederation." The UE World Congress was split over the issue, leading to an impasse. On August 3rd, Y36, a group of leading Martian colonists broke the deadlock on their own and issued the "Fundamental Declaration of the Martian Colonies," declaring independence from Earth.

Although elements within the United Earth government suggested military action to end the rebellion, UE Prime Minister Yasuhisa Miyake ultimately decided on a peaceful course of action. He feared that a civil war within the Sol System would destroy Earth's political standing within the Federation. Martian political independence was recognized in Y38. The Martian Fundamental Law established the Martian government as a constitutional republic, while the Treaty of Understanding and Reconciliation between Earth and Mars established formal diplomatic relations and free trade between the two worlds.

Mars applied for direct Federation membership in Y40 and was accepted in Y44.

IV. CULTURE OF MARS

Government: Mars is a constitutional republic with a strong central executive. The President is elected every six years by popular vote; the Fundamental Law (the Martian Constitution) places a term limit of two terms on the holders of the office. The Martian Senate is elected every three years by popular vote; there are 200 senators, each representing an electoral district of equal population. The Office of the President has wide discretionary powers in foreign policy and economic issues while the Senate has the power of the purse. The Fundamental Law enshrines the human-rights principles expressed in the Fundamental Declaration of the Martian Colonies, which itself drew on such Earth predecessors as Magna Carta, the U.S. Constitution, and the Constitution of the Sixth French Republic.

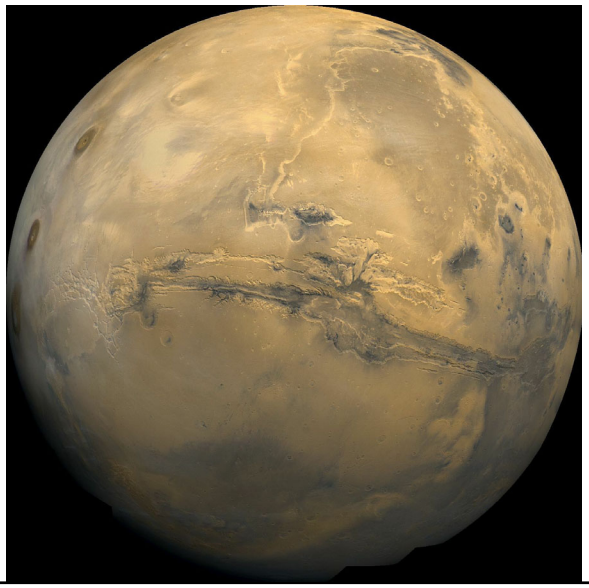
Mars is more conservative and militaristic than Earth and tends to take a hawkish stand in Federation Council debates. The Martian National Guard is well-funded, particularly the ground forces, which are nearly the equal of the Federation Marines in training and equipment. Martian Guard troop detachments protect hundreds of colonies in Federation space. The flagship of the Mars National Guard fleet is always named *Third of August*, commemorating the anniversary of the Fundamental Declaration.

Society: Martian society tends to be a bit more traditional than modern Earth society, particularly in terms of family structure and social mores. The largest urban areas (particularly the capital city of Schiaparelli) are as open and cosmopolitan as any place on Earth, but smaller communities tends to be more insular and less diverse culturally.

Economy: Aggressively capitalist, even by human standards, with a very strong manufacturing base devoted to military equipment and starship construction. The "Martian Mafia" of several defense consortiums dominates the Federation fighter design and construction market.

Laws: Derived from Latin and European traditions, particularly English Common Law and the Code Napoleon, with modern refinements to bring it in line with Federation standards.

Religion: Christianity and Islam are the two most common religions on Mars, although about 10% of the population are agnostic or atheist.



Alpha Centauri

SYSTEM SURVEY

Star Classes: This is a trinary system with three stars:
Alpha Centauri A (G2V yellow-white star, 1.09 stellar mass);
Alpha Centauri B (K1V orange-yellow star, 0.91 stellar mass);
Proxima Centauri (M5V red dwarf, 0.12 stellar mass).

Alpha Centauri is 4.3 light years from Sol. There are total of 11 planets orbiting these three stars.

Planets of Alpha Centauri A

I. Alden-Feyr: A Class-C hothouse, 7,321 miles in diameter. Similar to Venus, this planet hosts a small, domed, research facility.

II. Selecia-Feyr: Another Venus-like Class-C hothouse, 6,887 miles in diameter; it hosts a small, domed, research base.

III. Culden-Feyr: Home of the Alpha-Centaurans. Called "Alpha Centauri" in vernacular speech. See the planetary survey.

IV. Matra-Mayr: A Neptune-like Class-B gas giant with 10 large moons and a dozen smaller moonlets. All 10 of the large moons and six of the moonlets are mined for minerals.

There are numerous asteroids and Kuiper Belt objects, but none are of any commercial value.

Planets of Alpha Centauri B

I. Ginka-Feyr: Class-I hot rock, 4,999 miles in diameter, similar to Mercury. This planet has a high density (7.0) for its size and is rich in minerals. The system hosts extensive mining operations.

II. Heaa-Feyr: Class-O glacial planet, 7,335 miles in diameter. This planet was Class M in the distant past but has been locked in a deep ice age for at least 20 million years. There are several domed colonies and mining operations, with a total population of about 300,000.

III. Yahhla-Mayr: A typical Class-B gas giant with nine moons, six of which are mined for resources.

IV. Nairaf-Mayr: Another typical Class-B gas giant, with six large moons that are mined for resources.

There are numerous asteroids and Kuiper Belt objects, but few are of any commercial value.

Planets of Proxima Centauri

I. Alton-Kayr: Class-D rock, 5,872 miles in diameter.

II. Felieton-Kayr: Class-J cold rock, 7,103 miles in diameter, with a small mining station.

III. Hobbiton-Kayr: Class-J cold rock, 6,993 miles in diameter, with a research station.

IV. Morlok-Kayr (Cerberus): Class-M habital world, colonized by several nations from Earth when the Alpha-Centaurans showed no interest in it.

All of Proxima Centauri's planets are mineral poor and of little commercial value. There are numerous asteroids and Kuiper Belt objects; few of them of any commercial value.

PLANETARY SURVEY: Culden-Feyr

I. GENERAL INFORMATION

Status: Homeworld of the Alpha-Centaurans.
Location: Coordinates 2908, Federation.
Mass: 5.294 x 10^{21} metric tons.
Density: 5.4.
Diameter: 7,932 miles.
Class: M, borderline oceanic (Class N).
Surface Area: 198 million square miles.
Land Area: 26 million square miles.
Land Area as Percentage of the Surface: 13%.
Surface Gravity: 0.98G.
Mean Surface Temperature: 76°F.
Surface Pressure at Sea Level: 1.05.
Atmosphere Composition: Nitrogen: 76%.
Oxygen: 22%.
Argon: 1%.
Trace Gasses: 1%.
Pollution: Mild in industrial areas.
Orbital Distance: 112 million miles (1.20 AU).
Day: 25 hours.
Year: 442 local days (460 Earth days, 1.26 Earth years).
Axial Tilt: 20°.
Population: 1 billion.

II. BIOSPHERE

The homeworld of the Alpha-Centaurans occupies the classification borderline between Class M (Earth-like) and Class N (oceanic). The planet is covered with a vast series of island chains, but there are no true continents. Like most Class-M/N worlds, there are moving tectonic plates, a molten core, and a standard magnetic field. The oceans are deep and the the biosphere is thriving.

The *Atlas of Culden-Feyr* lists over 26,000 islands worthy of the name. There is a large amount of volcanic activity on the planet, which is both a blessing and a curse. The limited arable land is quite fertile from previous eruptions, but every few years a new cone will form over one of the major volcanoes, requiring either a massive geological engineering project to seal the breach, or mass evacuation of the local population. This is regarded as part of normal life, and has been for thousands of years.

Culden-Feyr has one moon, which is slightly smaller than Luna. The moon is mineral poor and is not mined, but harbors a large domed research facility devoted to improving warp propulsion technology. This facility, founded shortly after First Contact between Centaurans and Earthlings, is jointly managed by the United Earth and the Centauran governments to foster technological and cultural exchange. Earthlings often refer to this facility as the "Alpha Centauri colony."

PROFILE

Alpha-Centaurans are almost identical to Humans. The two species are genetically compatible and interbreed easily, without medical intervention. The main divergent traits are neurological: Alpha-Centaurans have a higher rate of activity in the brainstem and central nervous system compared to the average example of Homo sapiens, resulting in increased dexterity in females and greater strength in males.

Alpha-Centauran

50/24 points

Females

50 points

Attribute Modifiers: DX+2 [40].
Advantages: Charisma 1 [5]; Fit [5].

Males

24 points

Attribute Modifiers: ST+1 [10]; DX+1 [20].
Secondary Characteristic Modifiers: Will-2 [-10].
Advantages: Fit [5].
Quirk: Humble [-1].

Most Alpha-Centaurans will add Federation Standard as a known language in addition to their native language.

Federation Standard is the common language used by members of the UFP when communicating with other species within the Federation. Any Star Fleet personnel will need to have the language at Accented or better. Anyone doing business off of his own planet will also need the language at Accented or better.

III. HISTORY OF ALPHA CENTAURI

The most advanced native life forms to evolve naturally on Alpha Centauri are intelligent but non-sentient marine mammals. However, approximately 100,000 years ago, primitive humans were taken from Earth and "seeded" on Alpha Centauri by an unknown species (not the Old Kings). It is unclear who did this, and for what reason. Human populations were seeded on several other worlds in this same time period; see the section *Mysteries of the Federation* for more details.

For many centuries, Centauran society developed along similar lines to that of Earth, with the rise of primitive, agriculturally based societies and the gradual evolution of technology. Like Earth humans, Centaurans were warlike and fought among themselves. But approximately 2,000 years ago, a "population bottleneck" brought Centauran society to the point of collapse.

A series of devastating volcanic eruptions disrupted the climate, reducing agricultural output and setting off a huge scramble for resources. The combination of climate change and constant savage warfare (a period known to modern Centaurans as the "Man Wars") reduced the population to something less than 20 million by about -Y2000. The women, who were ultimately drawn into adopting the role of warriors when the male population became too depleted to fight on their own, finally banded together to end the constant conflict, seizing power in most nations and ending the feuding once and for all.

In the years after the end of the Man Wars, Centauran women tenaciously clung to their control over the rebuilding societies. While there were still rivalries and disputes, all were too worn down after centuries of fighting to pursue argument with any forceful vigor. At first the men were actively suppressed, banned from assuming positions that required them to be skilled at trade or military ability. Within two generations, however, as the climate stabilized and recovery began, the war fury which had burned in the last generation of male warriors burned itself out. The younger sons and grandsons of the once-proud warlords turned away from their dreams of glorious warfare, toward the endeavors of rebuilding the structure of society.

By -Y1500, men and women began to return to a balanced relationship as the fears of a male-driven apocalypse receded. Had events not taken an odd turn in the following years, things might have returned to normal. However, from about -Y1450 to -Y1250, there was a marked imbalance in the relative birth rate of females to males, dramatically favoring female births.

The reason for this was disputed. Some believed this was a form of divine retribution, the gods warning against a return to male dominance. Others blamed natural phenomenon, although the state of science and technology during this time period (TL3-4 in most regions) made it impossible to determine the actual cause. Indeed, even modern investigative techniques have been unable to unravel the puzzle of why male births declined so dramatically during this period. Some researchers believe that some sort of chemical compound natural to Alpha Centauri (and possibly related to the high volcanism of the planet)

was to blame. Others believe that an alien species may have been tinkering with the population as part of a biological or sociological experiment.

Whatever the reason, the imbalance came close to spelling disaster as there simply weren't enough men to keep the population growing. Because of this unexpected demographic shift, the social trend back toward gender equality was not only halted, but actively reversed. Men, even more so than before, found themselves constrained by the numerically superior female portion of society. In some areas, men became considered little more than breeding stock.

By -Y1200, the gender disparity in birthrate evened itself out, returning to a near 50/50 split. But the social changes first adopted to end the wars, and later reestablished to keep the population from spiraling to extinction, had become concretized, leading to a firm tradition of female dominance. In the centuries since this social inversion first occurred, there has been little or no call to reverse it. Today, of course, the view of males as simple breeding stock has passed away, but the tradition of male subservience has not.

The era of female dominance, while relatively peaceful compared to past history, still saw social conflict and occasional wars. The only "world war" in this period was the failed attempt of Empress Therena of Terakite to establish a world empire from -Y650 to -Y627. But the utter devastation of the "Man Wars" was avoided and the population gradually built back up.

Alpha Centauri is relatively poor in industrial resources compared to Earth. While most islands are fertile agriculturally, the population found it more difficult to build an industrial base than Earthlings did, simply because the necessary metals and raw materials (which had to be mined from the ocean depths in most cases) were much less accessible. As a result, Alpha Centauri was 50-100 years behind Earth in technological development. When humans began experimenting with FTL-propulsion systems, Centaurans had just developed their own interplanetary spacecraft. The Centaurans were the first species other than Vulcans met by Earth Humans.

Alpha Centauri quickly caught up with Earth and Vulcan technologically, and became enthusiastic founding members of the Federation. In the decade following contact between Earthlings and Centaurans, many Earthlings emigrated to Alpha Centauri due to the cleaner (and less war-ravaged) environment compared to Earth. While the government encouraged this at first (due to the quick boost it provided for technological development), immigration from Earth eventually caused tension between the two governments, as some Centaurans felt their culture would be subsumed by too great an influx of immigrants. But this problem subsided quickly, as Earthlings became less interested in Alpha Centauri and more interested in the hundreds of uninhabited colony worlds available for settlement. Today, relations between Centaurans and Earth Humans are excellent.

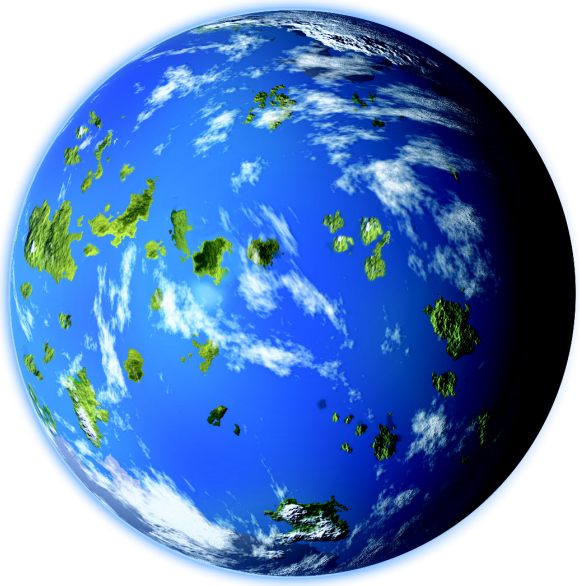
IV. CULTURE OF ALPHA CENTAURI

Government: The government of Alpha Centauri is democratic in character but more bureaucratic than Earth's. There are 98 administrative districts called "kites" that correspond closely to old nation-state boundaries.

Elections for the Representation Council (similar to United Earth's World Congress or the Vulcan Parliament) are held every five years. The RC then selects a Council Chairman to lead the government. Every 10 years a new President is elected by popular vote. The President serves as head of state, but the Presidency is mainly a ceremonial office; most of the power resides with the Council Chairman. There are specialized branches of the government dealing with civil law, finance, government policy, judicial interpretation, commerce, etc.

In many ways, modern Centaurans are the most politically conservative of the Federation member species. Within the halls of the Federation Council, Centaurans are fervent supporters of a constantly strengthened Star Fleet. They are often the first to call for the use of force to further the ends of the Federation. In these matters, they often find themselves allied with the militaristic Martians and Andorians, and opposed by the more peaceful Vulcans and Rigellians, with Earth and Cygnus usually taking a middle position. It should be noted that the Centauran government remains firm in its commitment to the principles and ideals of the Federation.

The Alpha-Centauran National Guard is second to none, exceeding even the strong Martian Guard in the level of preparedness and training. Military education is mandatory for all women between the ages of 16 and 20. There are several excellent military academies. The most famous one, Andia Militechnic, rivals Star Fleet Academy in the difficulty and sophistication of its curriculum and the success of its graduates.



Society: While Alpha-Centaurans correctly claim that men are not legally prohibited from establishing a wider role for themselves in modern society, it is also true that they are not encouraged either. However, since men are not legally prevented from any rightful activity, and haven't organized any substantial protest movement, the other Federation members tend to overlook the situation. Most Centauran men who dislike the situation simply leave the homeworld.

Economy: The Centauran economy is best described as free market capitalist with government-provided education and health care, like the rest of the Federation. The homeworld is relatively poor in strategic materials; agricultural products are the primary exports and heavy industrial production is limited in scope, at least compared to the other Full Member species of the Federation.

Centaurans themselves sometimes consider their "military expertise" to be their most important export to the Federation.

Laws: Centauran legal concepts are similar to human ones, and it was not difficult to bring the law code into alignment with Federation standards. Law enforcement is conducted mostly at the local level.

Religion: About half of modern Centaurans are atheist or agnostic, lacking a belief in God or a spiritual reality. Of believers, about 25% are Nemanites and 20% are Tedeists. The remaining 5% are members of smaller sects, cults, or non-Centauran religions.

First developed in recognizable form about the year -Y4000, Nemanism is a pantheistic/polytheistic religion that bears some resemblance to the human religion of Hinduism. There are a large number of goddesses and gods within Nemanism, the most popular being Mera (goddess of war and wisdom) and Tedra (goddess of love and compassion). As in Hinduism, the various personal gods and goddesses are considered incarnations or aspects of the absolute reality (Neman), which is similar to the Hindu concept of the Atman. There are a wide variety of denominations that exist within the overarching philosophy of Nemanism.

Tedeism is an offshoot of Nemanism, emerging about the year -Y2000 and coinciding with the end of the Man Wars and the rise of female domination. Tedeists are avowedly monotheistic, believing that the goddess Tede is the One True God who created and sustains the universe. Tede combines aspects of the Nemanist goddesses Mera and Tedra into one deity. The religion is avowedly matriarchal and at one point it was the official state religion in some areas. Tedeism is very conservative theologically; for centuries the leadership of the denomination resisted scientific progress and ideas in favor of a rigid fundamentalism. As a result, Tedeism has declined in influence over the last 500 years, losing adherents to the more open intellectual structure of Nemanism, and to general secularism. A reform movement within Tedeism opened the religion up to the facts of science about 100 years ago, arresting but not reversing its decline.

STANDARD PLANETARY CLASSES

For reference, Vulcan scientists established a number of broad categories of planetary types. Some very different planets can fit into a single category, and some planets at the limits of one category may be similar to planets in an entirely different category. The categories are:

Class A: This is a "hot" gas giant such as Jupiter which generates internal heat. There is no "surface" per se, just an increasingly dense atmosphere. See Class S.

Class B: This is a "cold" gas giant (does not generate internal heat), smaller and farther from the star, such as Uranus. It also has no surface.

Class C: This is a "hothouse" planet such as Venus, with a corrosive and/or toxic atmosphere.

Class D: This is an airless rock such as Luna. Classes D, I, and J are three different points on the same spectrum of airless rocks floating in space.

Class E: This is a "super-terrestrial" world, basically a larger-than-Earth planet with an atmosphere and biosphere and at least marginally habitable.

Class F: This planet has a sulphurous atmosphere.

Class G: A dry desert planet with no oceans, such as Mars. It may be cold or hot. Its atmosphere may be thin or without oxygen. There is rarely a biosphere. See Class K.

Class H: This is an "early Earth" planet with a developing biosphere (mostly bacteria, some low-grade plants). The atmosphere will be unbreathable to humans.

Class I: A rocky planet hot enough to melt lead, such as Mercury. The atmosphere (if any) will probably be thin and there will be no recognizable biosphere.

Class J: This is a cold rocky planet with a thin atmosphere (or none at all). Temperatures are below freezing, any water (and there may be none or very little) will be frozen, and there will be no recognizable biosphere.

Class K: This is a desert world with a breathable atmosphere and a working biosphere, such as Vulcan. There will be some small oceans, lakes, or seas, but these will be limited and some will be brackish.

Class L: A world similar to Earth, but with far less water. Oceans cover less than a third of the surface; there will be a breathable atmosphere and a working biosphere.

Class M: This planet is Earth-like.

Class N: Like Earth, but oceans cover 90% of the surface and humidity is high.

Class O: Like Earth, but much colder, with extensive glaciers trapping most of the water.

Class P: Most of the atmosphere is frozen into glaciers of carbon-dioxide or other gases.

Class Q: A frozen iceball, such as Pluto, that is more of a huge comet than a small planet. The orbit will often be erratic, and this is usually the outermost planet.

Class R: A nitrogen-ammonia atmosphere on an otherwise Class-J planet, such as Q'Nabb (in the ISC sector).

Class S: A small gas giant with frozen methane oceans with floating continents, such as Hydrax.

Class T: A semi-molten planet, such as Tholia in the M81 Galaxy, with high temperatures (above 212°F) and with inorganic life.

Vulcan

SYSTEM SURVEY: 40 Eridani 3

Star Classes: This is a trinary system with three stars:

Star A (K1V orange main sequence dwarf, 0.89 mass);

Companion star B (DA4 white dwarf companion, 0.50 stellar mass);

Companion star C (M5V red dwarf companion, 0.195 stellar mass).

Planets of Star A

I. Vulcan: Vulcan homeworld, see the planetary survey below.

II. Vultrax: A Class-G planet and a minor industrial world. See the planetary survey.

III. Leriat: A small Class-B gas giant with six moons, four of which are mined for resources. One moon is a large Class-J rock of planetary size (6,320 miles in diameter). This moon has a large domed mining colony with almost 3 million residents.

IV. VirKhar: A frozen Class-P world with a dense atmosphere composed of nitrogen, carbon dioxide, methane, and other trace gasses. With a diameter of 7,498 miles, it resembles a larger version of Saturn's moon Titan in the Sol system. A domed, research facility run by the Vulcan Science Academy employs 200 scientists and 6,000 support staff.

V. VhilKahl: Virtually a twin to VirKhar, this is also a Class-P world, slightly colder and smaller (7,287 miles in diameter) than its sister. Like VirKahr, it has no moon. It is uninhabited, although an automated industrial station extracts useful gasses from the atmosphere for export to Vulcan and Vultrax.

VI. Torvula: An uninhabited Class-J cold rock, 6,470 miles in diameter.

Kuiper Belt: There is a large asteroid, debris, and cometary belt beyond the sixth planet. Companion stars B and C do not have true planets, although both have the typical assortment of comets and asteroids. Some of them are mined for minerals.

Planetary Survey: Vulcan

I. GENERAL INFORMATION

Status: Homeworld of the Vulcans, major industrial world.
Location: Coordinates 2908, Federation.
Mass: 7.261 x 10^{21} metric tons.
Density: 6.1.
Diameter: 8,462 miles.
Class: K.
Surface Area: 225 million square miles.
Land Area: 169 million square miles.
Land Area as Percentage of the Surface: 75%.
Surface Gravity: 1.18G.
Mean Surface Temperature: 92°F.
Surface Pressure at Sea Level: 0.830.
Atmosphere Composition: Nitrogen: 74%.
Oxygen: 20%.
Argon: 3%.
Neon: 2%.
Trace Gasses: 1%.
Pollution: Mild in industrial areas.
Orbital Distance: 54 million miles (0.58 AU).
Day: 27 hours.
Year: 152 local days (171 Earth days, 0.468 Earth years).
Axial Tilt: 14°.
Population: 5 billion.

II. BIOSPHERE

Vulcan is a Class-K desert world, dominated by vast deserts, imposing mountains, and shallow seas. Earthquakes and volcanic eruptions are quite frequent. Despite the harsh conditions, there is a thriving biosphere, and most Vulcan life forms are (by necessity) extremely adaptable. Vulcan has no moon, but the planet has moving tectonic plates, a molten core, and a standard magnetic field. The planet is rich in mineral wealth. Its planetary gravity is higher than Earth's, but unlike many such worlds the atmosphere is thinner than Earth-normal. Vulcan is sometimes referred to as "Vulcanis" in older astronomy reference sources.

PROFILE

Renowned throughout the galaxy for their superb intellectual talents, Vulcans are legendary for their devotion to logic and peace, as well as their impressive psionic skills. While Humans, Andorians, and other species provide the economic and military muscle behind Federation power, the Vulcans are responsible for much of the Federation's scientific advancement and diplomatic success.

Vulcans are humanoid mammals with green, copper-based blood. They have a gestation period of 11 months in the womb, and an average lifespan of 200 Terran years. Vulcans have seven-year fertility cycles, an evolutionary adaptation to the moist/dry phase oscillation of the planetary climate. Conception can occur outside of this period,

but is uncommon.

There are different ethnic groups. The majority of Vulcans have pale, somewhat greenish skin. About 10% of Vulcans, descended from tribes originating near the equator, have darker skin pigmentation. Likewise, about 20% of Vulcans, mostly from the southern polar region, lack the nictitating membrane protecting the optic nerve. The Vulcan genome adapts quickly to new environments; the biological divergences between modern Vulcans and their exiled Romulan cousins is a reflection of this. However, Vulcans, Romulans, and Vidalians are still considered members of the same basic species. They can interbreed without difficulty despite their differences.

Originally warlike and emotional, today's Vulcans are a pacifistic people who do not believe in the assertive use of overwhelming force to resolve disputes. Their cultural devotion to pure logic, at the cost of greatly repressing their emotional identity, is well known. It should be noted that underneath the surface, Vulcans do have emotions, although most of them deny it. However, these emotions are rigidly controlled, through years of mental conditioning, intellectual training, and spiritual meditation.

A remarkable side-effect of this logic-based rationality is the enormously high incidence of psionic ability found in Vulcans. The Romulans, by comparison, are no more likely to show positive psionic potential than most other galactic species. While all Vulcans possess psionic potential, only about one in every 20,000 has the ability to become a true Psionic Master. A Vulcan character created without psionics is still a latent psionic, and (with GM approval) may buy psionic abilities in campaigns with no restriction.

Vulcan

70 points

Attribute modifiers: ST+1 [10]; IQ+2 [40].
Advantages: Acute Hearing 1 [2]; Extended Lifespan 1 [2]; Indomitable [15]; Less Sleep 2 [4]; Lightning Calculator [2]; Nictitating Membrane 1 [1]; Photographic Memory [10]; Regeneration (Regular, only while in Autotrance, -30%) [18]; Unfazeable [15]; Vulcan Psi Powers 1 [5].
Perk: Autotrance [1].
Disadvantages: Code of Honor (Logical behavior) [-10]; Honesty (12) [-10]; Intolerance (Emotional or illogical behavior) [-5]; No Sense of Humor [-10]; Pacifism (Self-Defense Only) [-15]; Truthfulness (12) [-5].
Taboo Traits: All forms of Psi except those included in Talent (Vulcan Psi).

Most Vulcans will add Federation Standard as a known language in addition to their native language.

III. HISTORY OF VULCAN

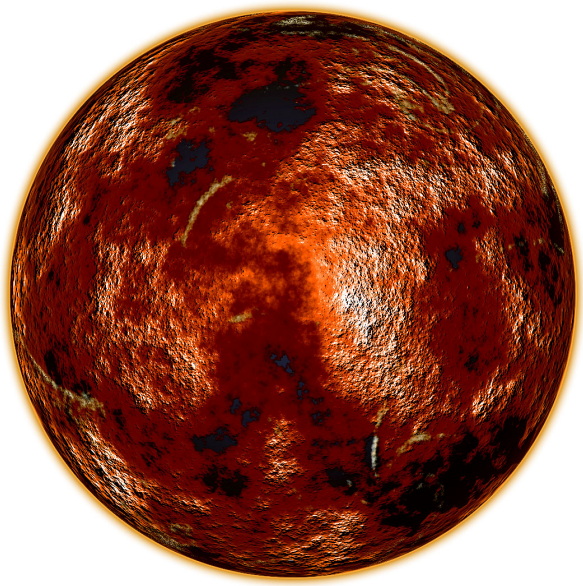
The biological origins of the Vulcan people are obscure, and much of Vulcan pre-history is a mystery. Archeological evidence indicates proto-Vulcan presence on the planet as far back as 400,000 years ago, but genetic studies show that Vulcan DNA is quite dissimilar to that of any other species on the planet. As a result, many scientists doubt that Vulcans originally evolved on their current homeworld. Some researchers believe that the Vulcans were seeded on their current world by an advanced group of beings. Others believe that the Vulcans may be descended from colonists of a starfaring precursor society that was destroyed in some sort of cataclysm.

Whatever their ultimate origin, the Vulcans existed as nomadic desert wanderers for millennia on their current planet. Life was harsh, as the early clans clung selfishly to whatever resources they could find, and seized by force whatever they could steal. Technology gradually developed through the centuries, stimulated by the needs of survival in general and warfare in particular. The ancient Vulcans were extraordinarily passionate and often savagely brutal.

The Vulcans achieved spaceflight at least once and possibly twice before being dragged back down into near-barbarism. The species avoided total annihilation only narrowly on more than one occasion.

Approximately 2,400 years before Y0, the Vulcans developed small, portable, and cheap fusion bombs, plus advanced biological warfare weapons. A series of brutal wars in the -Y2500 to -Y2400 period resulted in millions of deaths and widespread social dislocation. It was at this point that the Vulcans began turning away from their warlike ways, with the rise of the philosopher Surak and his teachings of "Kya-yai." The term translates into Federation standard as "logic."

Surak's ideals were not developed in a vacuum, and were in many ways a synthesis of schools of thought already in existence, albeit a brilliant synthesis. His personal magnetism, undoubted integrity, and superb powers of persuasion enabled him to build a social movement of immense vitality. Historically, the time was ripe, as millions of Vulcans were finally willing to listen to new teachings, rather than follow the old ways into a final abyss of destruction. The teachings of "Kya-yai" spread very quickly, comparable to the rise of Christianity or Islam on Earth, or Z'ulstal on Zoolax.



A rival philosophy to Kya-yai was "Kiay ri-ha-nai," or "unifying duty." The followers of this group were opposed to Surak's teachings of logic and peace. Some of them used violence and terrorism to resist Surak's cause; there were several cases of nuclear terrorism, one such attack killing Surak himself, but in the end, the ways of peace and logic won out. Those who refused to adopt the new ways were exiled, eventually founding the Romulan Star Empire. Vulcan spent the next 2,000 years creating a new, logical society, devoted to peaceful contemplation and the pursuit of pure intellect.

Vulcan developed primitive faster-than-light space travel in the decades before the rise of Surak. Space exploration was conducted in the surrounding star systems, including Sol. Fortunately, after the rise of logic, the Vulcans were more concerned with refining the principles of Kya-yai, and with developing their psionic skills, than with aggressive outward expansion. They had neither the intention nor desire to take advantage of more primitive species. Drawing lessons from their own past, they adopted the policy of not contaminating primitive cultures and to avoid contact with any species not capable of faster-than-light travel. This was a precursor to the Federation's Prime Directive.

The Vulcans had a few brief contacts with the Old Kings, who maintained an outpost on the nearby system of Zeta Reticuli. This advanced and powerful group of beings controlled most of what eventually became Klingon and Federation space, but the Vulcans learned little about them. The Old Kings were certainly economically and technologically capable of conquering the Vulcans or at least co-opting them as a "Subject Race." They refrained from doing so, for unknown reasons.

The Old Kings disappeared in -Y25, leaving a power vacuum in this portion of the galaxy. By this point, the Vulcans had diplomatic contact with the Andorians and Rigellians, starfaring civilizations from nearby systems. Diplomacy with the peaceful and idealistic Rigellians was amiable, but relations with the warlike Andorians were another matter; there was significant tension over economic and territorial matters.

In Y0, Zefram Cochrane, a human scientist and engineer, developed non-tactical warp drive and launched a primitive ship from Earth. A passing Vulcan survey vessel noticed the debut of human warp flight, leading (within weeks) to First Contact and bringing Sol into the larger galactic community.

In the early years, Vulcans tended to see humans as emotionally misguided junior siblings. In time, they grew to greatly respect the tenacity and adaptability of humanity. Despite occasional misunderstandings, the Human/Vulcan relationship is now a true partnership, one of the key factors behind the vitality of the United Federation of Planets.

IV. CULTURE OF VULCAN

Government: The Vulcan government is a parliamentary democracy. The planet is divided into 1,000 administrative provinces of approximately equal population. Each district elects a representative to the Parliament once every five years. The High Political Council is at the apex of the civilian government, managing domestic and foreign policy. The five members of the Council are elected by the Parliament, and each member of the Political Council serves as chairman for one year on a rotating basis. The chairman serves as both head of state and head of government. The Council also appoints the heads of the various government bureaucracies.

Vulcans regard formal political parties as "illogical," but this does not prevent "cooperative groups" from forming in Parliament; some of these groups last for decades and are parties in all but name.

The Vulcan National Guard is directed by the High Command, appointed by the Political Council. The Vulcan Guard focuses on space exploration more than most National Guards, although colonial defense is not neglected. Some conservative Vulcans find Star Fleet distasteful; young Vulcans with an interest in military service are often steered by their parents into the Vulcan Guard rather than Star Fleet.

Society: Vulcan society is not as monolithic as is perceived by other species. There are a variety of cultural differences from region to region and between ethnic groups. Certainly, the overwhelming majority of Vulcans subscribe to the principles of logic, but there are differences of interpretation, particularly in how it applies to family relations. Issues of marriage and sexuality revolve around the seven-year fertility cycle and related Pon Farr "madness." These matters are quite complex and difficult for outsiders to understand. Conservative Vulcan families follow a tradition of male dominance in family affairs; wives are considered the "property" of their husbands, with the male taking the lead role in major decisions. To many modern humans, Vulcan family life appears "illogical" and a throwback to more primitive modes of thought, but to describe Vulcan society as "sexist" is highly misleading. Men and women are equal in public affairs, and females often rise to positions of social, religious, and political dominance.

Economy: Mixed, generally free-market in orientation, but with a significant government sector even by Federation standards. Vulcan corporations tend to take a "long-term" view more frequently than their Human or Orion counterparts, which (the Vulcans believe) are too focused on short-term profits. As a result, the Vulcan economy grows more slowly than many other Federation members, but this growth is also more stable and sustainable, with fewer recessions. The vast wealth of the Federation keeps the Vulcan standard of living quite high. Education and technology are heavily emphasized by the government, which provides the various Vulcan research academies, as well as private entrepreneurs, lavish grant funding for scientific

endeavors. There is less heavy industry than on Earth or Andor. Nevertheless, Vulcan shipwrights and construction engineers are among the most skilled in the Federation.

Laws: Surak's legal masterpiece *Codex of Applied Logic* provides the foundation of most Vulcan law; in effect, it is their constitution. Administration and day-to-day police functions are handled at the city or provincial level, with Federation courts handling any serious "crimes against the state" (treason, espionage, etc.) that may occur.

There is little in the way of crime, and violent felonies are quite rare among Vulcans, although not totally unheard of. Since the days of Surak, the death penalty has been limited to only the most heinous violent crimes. Only one Vulcan (an insane serial killer with powerful psionic abilities and a proven ability to escape from prison) has been executed in the last 500 years, and even his execution was highly controversial.

Religion: The discipline of Kya-yai underlies Vulcan spiritual and religious thought, but there is more diversity within "logic" than humans may suppose. There are many different "paths" within mainstream Kya-yai, and numerous smaller movements and sects. All revere Surak as a philosopher and spiritual teacher, but there are differences in interpretation and emphasis. Mainstream Kya-yai is neutral in regards to the existence of a deity or spiritual reality. Some Kya-yaistic sects believe in a monotheistic or pantheistic God, while others do not; a few are avowedly atheist. Respect for diversity is an important concept for nearly all Vulcans, so there is little in the way of overt hostility between sects. A small minority of Vulcans reject logic entirely, embracing the passions. They tend to be outcasts from mainstream society, often leaving Vulcan altogether to live among humans or other emotional species.

Planetary Survey: Vultrax

I. GENERAL INFORMATION

Status: Minor industrial world.
Location: Coordinates 2908, Federation.
Mass: 2.558 x 10^{21} metric tons.
Density: 6.0.
Diameter: 6,009 miles.
Class: G.
Surface Area: 113 million square miles.
Land Area as Percentage of the Surface: 100%.
Surface Gravity: 0.822G.
Mean Surface Temperature: -42°F.
Surface Pressure at Sea Level: 0.579.
Atmosphere Composition: Carbon Dioxide: 90%.
Nitrogen: 7%.
Argon: 1%.
Neon: 1%.
Trace Gasses (including oxygen): 1%.
Pollution: Very mild in industrial areas.
Orbital Distance: 87 million miles (0.935 AU).
Day: 22 hours.
Year: 381 local days (349.6 Earth days, 0.958 Earth years).
Axial Tilt: 10°.
Population: 859 million.

II. BIOSPHERE

Vultrax is a typical Class-G world, terrestrial, but with very little free water and only trace amounts of oxygen in the atmosphere. Geologic evidence suggests that the planet was once warmer and wetter, but most of the water is currently locked in polar icecaps and frozen subsurface mud. There is evidence that native microscopic life thrived here millions of years ago, but all current microbiotic species are those accidentally imported from Vulcan during colonization. The planet is very rich in minerals, and provides a significant amount of resources for the Vulcan economy. The population lives in sealed domes, two large orbiting complexes, and underground habitats.

III. HISTORY, CULTURE, AND ECONOMY

Vultrax was first explored by Vulcans using chemical-powered rockets more than 5,000 years ago, long before the age of Surak. There were at least two attempts to found colonies in ancient days, but all failed due to political infighting. The first successful colonization project was undertaken by one of the old Vulcan nation-states just before the rise of Surak. After a slow start, the colony flourished following the adoption of logic. Vultrax is now a thriving planet, a prime center of manufacturing for the Vulcan economy. A major shipyard, jointly operated by the Blohm und Vulcan industrial cartel (owned by Humans and Vulcans), orbits Vultrax.

The culture is typical Vulcan, although Vultraxian society tends to be slightly less traditional than the homeworld. About 14% of the population consists of other Federation species, particularly Humans (7%) and Rigellians (6%).

Andor

SYSTEM SURVEY: Epsilon Indi

Star Class: Epsilon Indi (K4V orange dwarf, 0.78 stellar mass).

Located 11.8 light years from Sol, Epsilon Indi has two brown dwarf companions. The Andorians themselves call the star Tos Vlest, which translates as "life giver."

Planets

I. Lasa: Class-I Mercury-like hot rock 5,330 miles in diameter. The planet is relatively rich in minerals and hosts several mining operations.

II. Andor: Andorian homeworld, see the detailed planetary survey.

III. Sapphirex: Class-G world similar to Mars, and a major industrial world. See the planetary survey.

IV. Dhowkreen: Class-A gas giant somewhat larger than Saturn, and a minor industrial world. See the planetary survey.

A: There is a large asteroid belt between the orbits of Dhowkreen and Zhukarak. The asteroids are mined for minerals and are a rich source of dilithium.

V. Zhukarak: Class-B gas giant, and a minor industrial world. See the planetary survey.

K: There is the usual Kuiper Belt.

PLANETARY SURVEY: Andor

I. GENERAL INFORMATION

Status: Homeworld of the Andorians, major industrial world.
Location: Coordinates 2908, Federation.
Mass: 5.821 x 10^{21} metric tons.
Density: 5.8.
Diameter: 7994.2 miles.
Class: O.
Surface Area: 201 million square miles.
Land Area: 112 million square miles.
Land Area as Percentage of the Surface: 56%.
Surface Gravity: 1.07G.
Mean Surface Temperature: 34°F.
Surface Pressure at Sea Level: 1.15.
Atmosphere Composition: Nitrogen: 82%.
Oxygen: 17%.
Argon and Other Trace Gasses: 1%.
Pollution: Mild in industrial areas.
Orbital Distance: 35 million miles (0.38 AU).
Day: 16 hours.
Year: 148.5 local days (99 Earth days, 0.27 Earth years).
Axial Tilt: 34° (current), 3° originally.
Population: 8 billion.

II. BIOSPHERE

Andor is a Class-O world, similar to Earth but much colder with extensive glaciations. The majority of Andor's surface landmass lies within the northern hemisphere, where two great continents dominate the area, with several large islands below the equator. About 56% of Andor is covered by land and the remaining oceans are remarkably shallow; the maximum depth is three miles with an average depth of one mile. The ratio of land to liquid water and the relative low density of the water contribute significantly to the already arctic conditions of the world.

Much of Andor's water is bound in glacial-ice sheets which if melted would shift the land-to-water ratio by as much as 20%. The majority of the continents are in a perpetual deep freeze, particularly the inner reaches of these landmasses. The vast majority of the cities of Andor exist on the southern edges of these continents close to the equator, where the oceans moderate temperature.

The axial tilt means that the hemispheres have pronounced seasons. In the North the summer means a moderate thaw and a brief but intense growing season in areas where glaciers don't cover the land. Along the equator and in the southern hemisphere, the summer is quite balmy and temperatures can rise as high as 50°F. The winters are bitter in both hemispheres. Weather is another area of concern, as the faster-than-average spin of the planet generates heightened activity.

It should be noted that Andor was not always a Class-O world. At one time Andor was a typical Class-M world with an axial tilt at just three degrees. It also orbited slightly closer to the star. In this prehistoric state (some 2 billion years ago) Andor was covered with lush jungles and abounded with life. Then the large but unstable moon of Andor broke apart, causing geological chaos. Andor was rocked into an erratic orbit and knocked off kilter, not to mention showered by debris. Andor eventually came to rest in its current orbit and is now stable in that path.

Most life on Andor was wiped out by this catastrophe. Yet there was a hidden benefit to the disaster. The tectonic upheaval created extensive volcanism and related geothermal activity. Many of the life forms were saved by the warmth that this geothermal activity provided and they continued to evolve, sheltered in the depths of the earth, safe from asteroid impact and massive climate change. Indeed the precursors for the Andorians evolved from mammals that retreated to the warmth of these geothermal zones.

The Andorians currently use extensive weather-control stations and satellites. To the surprise of some observers, they have done relatively little to alter their world's overall climate, using weather control mainly to limit the amount of damage from powerful storms that the fast spinning planet produces. This is due to cultural reasons, plus most of the equatorial cities would be submerged if the climate were warmed significantly.

Andor has five moonlets, remnants of the original large moon. These pieces have stabilized in their orbits and are no longer a threat to collide with Andor. To an observer on Andor they resemble five beautiful blue jewels placed in an orbital corselet, and adorned around the planet. Each of the five "jewels" is named for a great Ancestor of Andor: Ankasar, Devkesh, Tarval, Ukaltec, and Skev. The five moonlets are usually referred to as the Corselet, and are home to an extensive network of bases and defenses.

PROFILE

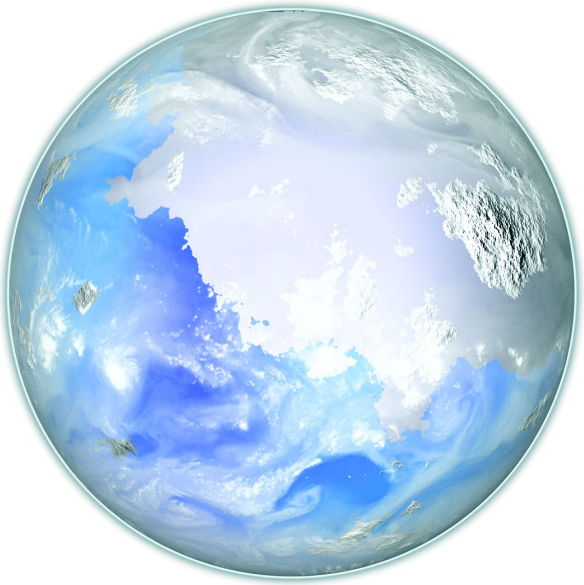
Andorians are tall, slender humanoids with blue skin, white hair, and obvious "antennae" protruding from the top of their heads. As a species, Andorians are renowned for their heightened perceptive acuity, which stems from the great number of predatory creatures that populate the homeworld. The "antennae" are actually extensions of their sinus cavities, allowing the Andorians a great sensitivity to minute variations in pressure and temperature. The "antennae" provide improved hearing and an enormously enhanced sense of smell. The actual receptors are situated within the depressions at the tips of the "antennae" and are protected by the hard cartilaginous tissue that keeps the "antennae" rigid. Andorians' visual ability is above human standards. This highly developed nervous system does come with some drawbacks. An Andorian's low pain threshold is due to the abundance of nerves throughout the body and much of the "loner" trait shared by most Andorians is due to the need to relieve the body of the continuous over-stimulation that it undergoes during the day. A healthy Andorian with proper nutrition and medical care will live 100-120 years.

Andorian

50 points

Attribute Modifiers: DX+1 [20].
Secondary Characteristic Modifiers: Per+5 [25].
Advantages: Discriminatory Smell [15]; Subsonic Hearing [5]; Ultrahearing [5]; Vibration Sense [10].
Disadvantages: Hidebound [-5]; Loner (12) [-5]; Low Pain Threshold [-10]; No Sense of Humor [-10].

Most Andorians will add Federation Standard as a known language in addition to their native language.



III. HISTORY OF ANDOR

A. Early Development

The food chain of Andor is top-heavy with predators, and the Andorians are not naturally at the top, but somewhere in the middle. As noted earlier, the growing season on Andor is brief and intense. Omnivores and herbivores gorge themselves in this season and predators feed constantly throughout the year on these creatures. It requires vast expenditures of calories for most species to stay warm and active in the cold environment and the predators battle each other for the calories desperately. The physical conditions of Andor create a situation of steeply declining resources through the seasonal year and invoke predatory savagery on a scale much greater than other worlds. Predators range from the great blue bear and the shrew-like cavern rat on the mammal side, to the massive glacier beetle and the glimmer fly on the insect side.

As they evolved, the early Andorians gathered in the geothermal zones and battled for survival with the predators and other species that also desired these warm locations. The resource-poor environment forced strict population control and limited the size of these early groups. Most were extended family units or small bands. Nevertheless the Andorians utilized fashioned tools/weapons, tactical coordination, and conservation to overcome their foes, defend their shelters, and preserve their resources. They eventually battled their way to the top of the food chain and began to increase their population and spread out over their world.

Initially these groups settled land that the geothermal conditions had rendered free of ice. Having evolved in the interior of the two great northern continents where most of the geothermal activity is located, these early groups began to master growing and animal husbandry techniques relative to the surface seasons. This permitted the first true population boom and the development of tribal tyks.

As population stresses increased, and usable lands were depleted, conflict between these early tyks was inevitable. The first Andorian wars were little more than large skirmishes, yet they were more devastating than the nominal number of war casualties would indicate. Even though resource stabilization had been attained, the wars toppled the delicate balance. As one tyk lost its resource base/balance it sought to right this via trade or war, and there was precious little extra for trade. A new savage age descended on the Andorians as they were hurled back to scraping to survive, due to their own wars.

The Andorians faced extinction once again, but were saved by the first Great Ancestor: Ankasar. A great hunter and warrior, Ankasar traveled widely and saw the suffering of the tyks; he decided that something had to be done. Utilizing techniques used to solve disputes between hunters of his band over division of a kill, he devised the first methods and rules for dueling. He and his band introduced these concepts and techniques to every warring group of tyks they could reach.

The basic concept was the two disputing parties would meet, declare their demands, and then present their best fighters to duel. The winner would be rewarded the lion's share of the demands and the loser would take a minority share. In this way the resource base of the tyks remained intact and stability returned to the tyks. Eventually Ankasar established a dueling society and school, and all the tyks sent their most promising warriors to his school. There they were taught the art of dueling and the concept of "Khun-Haga" (silent honor). They would then return to their home tyks and champion them, yet their bond of Khun-Haga would unite these duelists in the overriding concept of species preservation and was the first step toward true global unity.

B. Era of the Ancestors

This era corresponds roughly to the classical era and Bronze Age of Earth, as the Andorians had finally reached a state where leaps of technology and culture could be facilitated. Several great leaders appeared at this time and contributed to the advancement of the Andorians. The first was Devkesh; a great trader, he pioneered the creation of the cooperative, based on trading and barter. The cooperative became an integral part of Andorian culture. Devkesh started the system of trade that brought the farthest tyks together and set in motion the exchange of knowledge, goods, and skills that a growing civilization needs to prosper.

Tarval, a great smith, brought the development of metallurgy to new heights. He pioneered the development of bronze-like alloys and spread this knowledge. Rumored to be a Seer, a person with advanced cognitive abilities, Ukaltec codified the basic principles of behavior and philosophy of the myriad Andorian tyks. Her works created a framework for society to govern itself and could be compared to the idiolects of Confucius, the Torah, and the Code of Hammurabi. Finally the great explorer Skev led an expedition beyond the Southern Mountains and discovered the fertile and (somewhat) temperate equatorial plains bordering the Great Southern Sea.

C. Era of the Rel-Tyks

Beginning circa -Y9000, the Andorians began mass migrations into the southern continental regions, and from there to the islands of the southern sea. Here they prospered on a scale never before realized. Cities rose and eventually regional tyks were forged. These rel-tyks began to develop rivalries and soon real war returned to Andor. Corresponding roughly to the Iron Age of Earth, this era saw great advances in technology and culture. The relative abundance of resources caused a turning away from many of the traditional ways of the Ancestral Era and dueling was no longer used to settle the disputes of tyks and rel-tyks.

This era culminated in the year -Y3500 at the Battle of Vezhnak. Here three great alliances of rel-tyks met in battle both on land and at sea. At the height of the battle a tremendous blizzard-typhoon (called a "Kaarst" in Andorian) wiped out the city and 90% of the combatants and heralded an era of catastrophic cyclical weather which brought the era of the rel-tyks to an end.

D. Time of the Kaarst

For about 1,000 years civilization in the equatorial regions was battered by Kaarsts of immense scale, which curbed progress significantly. Caught completely unprepared for the hardships and seduced by the era of plenty, millions died. Many returned to the continental interiors and there joined with the more primitive, yet wiser, traditional tyks. Here they began the Reformation of Qellek.

This reformation rejuvenated and reaffirmed the teachings of the Ancients and integrated the teachings with the cultural, technological, and social changes of the south. The result was a philosophy that encouraged progress, competition, peace, and trade, yet tempered it with conservation, social honor, and representative government (the latter in the hope of preventing a return of the despotic rel-tyks). Dueling was incorporated as a critical adjunct to the resolution of judicial issues and a viable alternative to political disagreements. War, though possible, was now made much more unlikely.

E. Era of the Foundation

The Qellek Reformation took about 500 years to establish. With its foundation, the Andorians began the modern era. They progressed through the march of technology. Eventually techniques to mine beneath the glaciers were developed. Advances in aquaculture, weather control, architecture, chemistry, physics, and mathematics propelled the Andorians forward.

F. ERA OF ASCENSION

In the year -Y138 Andorian scientists predicted that a second period of Kaarsts was coming, and would descend upon the Andorians within 30 years. Circa -Y130 a unified planetary government was established to help face this pending natural disaster. One of the first acts of the new government was the creation of the northern preserves which maintained the sanctity of the origin points of the species and the honored status of the traditional institutions located there.

The government soon began an intensive planetary program to develop weather control methods to regulate the impending disaster of forthcoming Kaarsts. Eventually breakthroughs were made, based on charged-ion emissions from targonite crystals. These emitters could only work if deployed on the ground and in orbit. The industry of space travel via chemical rockets was crash-developed and succeeded in deploying the first weather-control satellites in the nick of time. Thus began the space age of Andor.

In the year -Y109 Andor landed manned craft on Ankasar. Once established in space, the Andorians built space probes in order to explore their star system. By year -Y99, probes powered by ion engines and fueled by fission reactors, had reached the farthest ends of the system. Andorian cooperatives took to space in earnest when large mineral deposits were discovered in the asteroid belt and on several of the planets in the system. Soon colonies were established on Sapphirex, Dhowkreen, Zhukarak, in the asteroid belt, and on the Corselet. A system of space stations was built to facilitate travel between these far-flung colonies.

Andor was forced to develop warships beginning in year -Y67 when space creatures resembling serpents (apparently a relative of the more common Space Moray Eel) attacked Andorian colonies and also the homeworld. The Andorians, using improvised weapons, believed that they had defeated and driven off the creatures, but it was soon discovered that a nest of them had been established in the Oort Cloud. Andor built its first battle fleet and attempted to eliminate this threat, but was repeatedly defeated by the tenacious monsters defending the Oort nest. The creatures were very hard to target due to a natural form of Electronic Counter Measures and had regenerative powers, so overwhelming damage was needed to kill them. In addition they had the ability to leap to faster-than-light speeds and outmaneuver the Andorian ships.

As a result the Andorians developed the modern equivalent of advanced fire-control scanners (to hit them before they leaped), targonite warhead drones, (that kept the creatures at bay by chasing them), lasers, and fusion reactors. By studying the physiology of the serpents, Andorian scientists developed non-tactical warp drive in order to effectively hunt down escapees before they could regenerate and spawn more serpents. The final Oort Cloud serpent nest was discovered and eradicated in -Y39.

The Old Kings never contacted the Andorians and the Andorians were apparently unaware of their existence. First Contact with the Vulcans came after the Andorians launched their first interstellar exploration mission in -Y30. Although diplomatic missions were established, relations with the Vulcans were very difficult and the two planets almost came to war on more than one occasion before the formation of the United Federation of Planets.

IV. CULTURE OF ANDOR

Government: Andor is governed at every level by representative democracy. Government, as it is defined by Andorians, starts at the neighborhood level and ascends through the city/rural, regional, continental, and planetary levels. At each level the governmental entity is a "tyk."

It is important to explain Andorian organizations and their terminology. At the lowest level of Andorian society is the vyk (family) and the kez (unattached individual). Following this forward is the vyk-tez (extended family). All of these organizational groups will probably belong to a cooperative (cek) which can represent economic, philosophical, skill, professional, labor, and any number of other organizational reasons.

Cooperatives' authority is invested in a council; these are elected by applying one vote for vyks, two for vyk-tez and one vote for every appropriate grouping of kez. Vyks usually collude to focus their votes (minors are not included). Kez groupings (defined by the cek) will debate a vote and the majority within the grouping will decide where their vote goes.

Unlike human organization where the family is the most important basic social grouping, the cek fills that role for Andorians. Andorians can belong to more than one cek, but must choose the one that is their primary affiliation. It is in this organization that their votes are counted.

The definition and requirements for cek organizations are framed in the Planetary Constitution of Andor. New ceks are created by petitioning and granted by the government. For most Federation citizens dealing with Andorians, they will be dealing with a cek; since humans have given the name "cooperative" to the cek in order to better relate to them and understand their functions, this name has stuck.

Groups of ceks gather to form tyks. Tyks come in two primary types: political and non-political. Non-political tyks retain the basic name and then are further defined by their function: e.g., Andorian Mining and Energy Tyk. Political tyks are defined by the size of the area they control. Alk-tyk (neighborhood), rel-tyk (city), zalk-tyk (regional), bel-tyk (continental), gav-tyk (planetary). Tyks are controlled by a council elected by the ceks that make them up. Each cek has one vote in both the elections of political and non-political tyks. Each level of government is decided by the lower tyks which have one vote each.

The Gav-Tyk is the only one that has a different method. In its case all the tyks vote with the following values: alk-tyk = 1, rel-tyk = the number of alk-tyks within it, zalk-tyk = number of rel-tyks, balk-tyk = number of rel-tyks + the number of zalk-tyks.

The Andorian Gav-Tyk could actually represent a minimum of 34% of the actual tyk organizations on Andor. Also

individuals that are not attached to a cek have no say whatsoever in the governments above them. This has led some other Federation members to question whether the Gav-Tyk truly represents a unified Andor or not.

Society: Andorian society is predicated on the cek. All the main efforts of an individual are focused on making the cek viable and profitable in whatever the cek is engaged in doing. The cek then makes life easier for the individual.

Andorians have developed several social traits which aided in their survival as a species. These traits include Trak and Khun-Haga. "Trak," which literally means "no waste," developed as a societal response to limited resources. Trak tends to make Andorians devise a plan and adhere strictly to it until the fruition of the plan. This tends to preserve resources and effort.

Unlike Humans, who will try several solutions to a problem or task, wasting effort and resources in a search for the best way to achieve their goals, Andorians are much more careful and deliberate when executing a task. This trait contributes to the hidebound nature of Andorians and tends to trend them toward the philosophy of "keeping what works" and less toward innovation, unless it is absolutely necessary. Trak is also seen in the brusque, humorless way that Andorians communicate, the thought being that less is best.

Khun-Haga ("silent honor") is a philosophy that permeates Andorian society. Like most philosophies it has different degrees of interpretation. The most common is the implied trust that is placed in the individual of the cek to do his best to accomplish his job to the utmost of his ability. Khun-Haga is given to those who demonstrate devotion, perseverance, and trustworthiness to the cek and tyk to which they belong, and in turn they are shown loyalty from the cek. This loyalty is displayed more by what is not done than by what is done.

A cek will show Khun-Haga by not watching members while they work, by entrusting them with valuable equipment without security concerns, by not demeaning them with demands for more productivity, or by not congratulating them for meeting or exceeding production goals because attaining those goals is reward enough. Khun-Haga combined with the physical need of an Andorian to "rest" his highly developed senses is the primary reason for their tendency to being loners. They simply feel that constant social interaction while working detracts from efficiency and represents a lack of trust from their compatriots.

The cooperative or cek is the primary social unit of Andorians; eventually most individuals will find their way into one of these units. However, not all Andorians do. These are individuals that simply don't fit the social norm and tend to wander about trying to find something to fulfill their lives. Andorians call these "Kez-venta" (wayfarers). Wayfarers tend to live in the fringes of society and often are involved in criminal pursuits, but not always. Wayfarers will sometimes find themselves wandering the stars in search of purpose.

Marriage and family is the social norm on Andor as it is on many Federation worlds. Andorians will usually marry someone from the cek or from cooperatives that interact with the cek they belong to. There is little social differentiation between the roles of males and females, unless the female is with child and until children reach the age of organized education. During these times the female is primarily involved with the children but this is by no means set in stone and role reversals are rare but evident.

Economy: The economy of Andor is strong and vibrant, as the planet is rich in minerals and industry. The Andorian system is home to major producers of ships, shuttlecraft, fighters, and bombers. Andorians are foremost in the production of fire-control scanner technologies for all types of craft and of weather-control satellites. Andorians contribute heavily to Federation drone production. Andor itself has facilities for major arctic-weather training and equipment production.

In general, Andor has all the major industries that any modern world has and, because of Andorians' social organization, are quite adept at trade and free-market competition. Andorian ceks were primarily high-quality craft oriented and had significant problems dealing with the highly creative Humans who were adept at innovation and just as competitive as the Andorians themselves. But when Human companies began to propose mergers with Andorian tyks, combining the qualities of the two species, economic growth soared, and now Andor is quite prosperous.

Laws: Similar to most free worlds of the Federation, Andor has a judiciary and law structure based on moral and ethical philosophies that benefit the society and the rights of individuals. These are codified and enforced by police and other law enforcement agencies. However, Andor has an ancillary system that parallels the courts and can replace the court system.

On Andor the custom of dueling is embedded in their system of law. Andorians involved in personal disputes or ceks involved in civil disputes with other ceks/tyks, can choose to duel instead of choosing to litigate. On the individual level this is accomplished by either dueling oneself or by employing a cek champion or a professional duelist from a dueling cek. In 99% of these duels, death is not the result (unless by accident) and victory is determined by rules established for the type of duel that is called for. Some examples are first blood, submission, unconsciousness or other severe injury, and three cries. The latter is a type of competition that exposes an Andorian's low pain threshold. When receiving a wound, the pain is usually intense enough that a duelist cries out in response; only the most disciplined can control this nearly automatic outburst and once three cries have been uttered, the duel ends. Typically the victor is awarded most of his demands but not all; this is in keeping with time-honored tradition from the era of the Ancestors.

Ceks often engage several duelists and, in some cases, team duels to settle their disputes, citing the need to eliminate "luck" from the resolution. Dueling ceks and tyks have the comparable role of law firms on Earth and many have considerable political influence, although there

has been a significant reduction of the latter due to the increase of litigation to resolve conflicts. The dueling tyks are currently aligned with the traditionalist tyks and are on the "outs" with the planetary government and most of the policies of that government.

Religion: Ancient Andor possessed a multiplicity of religions based on gods and spirits of nature. Over time this has been supplanted by a philosophy based on the combined teachings of Ancestors that contributed to the survival of the species and culture of Andor. The teachings are represented in the writings of the Qellek reformation and are available in the *Almanac of the Ancestors.* About 90% of Andorians subscribe to this philosophy with 10% still supporting the elemental spirits of old or new religions from other worlds.

Planetary Survey: Sapphirex

I. GENERAL INFORMATION

Status: Major industrial world.
Location: Coordinates 2908, Federation.
Mass: 2.902 x 10^{21} metric tons.
Density: 5.8.
Diameter: 6,339 miles.
Class: G.
Surface Area: 126 million square miles.
Land Area: 120 million square miles.
Land Area as Percentage of the Surface: 95%.
Surface Gravity: 0.838G.
Mean Surface Temperature: 0°F.
Surface Pressure at Sea Level: 0.75.
Atmosphere Composition: Carbon Dioxide: 88%.
Nitrogen: 7%.
Oxygen: 4%.
Argon and other trace gases: 1%.
Pollution: Mild in industrial areas.
Orbital Distance: 63 million miles (0.67 AU).
Day: 23 hours.
Year: 236 local days (226.3 Earth days, 0.62 Earth years).
Axial Tilt: 10°.
Population: 750 million.

II. BIOSPHERE

Sapphirex is a typical Class-G cold desert world, similar to Mars but with a thicker atmosphere. There are small, shallow, frozen seas of water, ice, and native microscopic life forms that live near volcanic vents. The planet is extremely rich in minerals. The colonies here are domed as the atmosphere is unbreathable.

III. HISTORY, CULTURE, AND ECONOMY

Colonized very soon after the Andorians moved into space, Sapphirex has a thriving economy based on mining, manufacturing, and shipbuilding and is one of the most important sources of industrial production in the United Federation of Planets.

Planetary Survey: Dhowkreen

I. GENERAL INFORMATION

Status: Minor industrial world.
Location: Coordinates 2908, Federation.
Class: A.
Orbital Distance: 90 million miles (0.97 AU).
Year: 1.08 Earth years.
Population: 250 million.

II. BIOSPHERE

Dhowkreen is a Class-A gas giant, similar to Saturn. There are 20 large moons and dozens of moonlets, in addition to a minor ring system. The largest moon, Dhowkreen II, is a Class-O world, 7,288 miles in diameter, with a temperature and atmosphere within tolerance for Andorians and other humanoids to live on the surface unaided.

III. HISTORY, CULTURE, AND ECONOMY

Colonized shortly after Sapphirex, Dhowkreen and its moons are significant producers of metals and industrial chemicals for the Federation. Culturally less traditional and more open than the homeworld, about 20% of the population comes from other Federation worlds. About 200 million people live on Dhowkreen II; the remaining 50 million live on the other moons or in orbital habitats.

Planetary Survey: Zhurkarak

I. GENERAL INFORMATION

Status: Minor industrial world.
Location: Coordinates 2908, Federation.
Class: B.
Orbital Distance: 140 million miles (1.51 AU).
Year: 2.10 Earth years.
Population: 130 million.

II. BIOSPHERE

Zhurkarak is a Class-B gas giant, similar to Neptune. There are 10 moons, the largest of which, Zhurkarak IV (Class D), contains significant deposits of dilithium and iridium. The other moons are mineral rich as well.

III. HISTORY, CULTURE, AND ECONOMY

The Luna-sized Class-D moon, Zhurkarak III, hosts a large facility manufacturing shuttles, fighters, and bombers. It is one of the largest such facilities in the Federation, but builds designs that originated on Mars or Cygnus. Approximately 80% of the population lives on Zhurkarak III (35%) and Zhurkarak IV (45%). The remaining 26 million live on the smaller moons or orbital habitats.

The Andorian survey was written by Hugh Bishop.

Rigel

SYSTEM SURVEY: Rigel

Star Class: Rigel (B8I blue supergiant, 17 stellar masses). Located approximately 770 light years from Sol and hosting an extremely unusual set of planets for a star of its class, the Rigel system is heavily populated and consists of 12 planets.

Planets

I. Pres'lar: A Class-H superterrestrial world 14,872 miles in diameter, with a blistering hot environment. Although rich in minerals, mining is virtually impossible given the atmospheric conditions and close proximity to the star.

II. Thell'naar: A Class-A gas giant and a minor industrial planet. See the planetary survey.

III. Yee'laa: Also a Class-A gas giant and a minor industrial planet. See the planetary survey.

A: There is a huge asteroid belt between the orbits of Yee'laa and R'ehhaknnizah'lohna, probably a planet that never formed or possibly a remnant of a breakup of a larger planet. Thousands of these asteroids are mined for their minerals.

IV. R'ehhaknnizah'lohna: Commonly called "Rigel" or "Rigel IV," this Class-M planet is the homeworld of the Rigellians. See the planetary survey.

V. Talla-lennakk'haom: Commonly called Strongport, Class M, and a major industrial planet. See the planetary survey.

VI. Filii'lon: Class-B cold gas giant. The moons collectively constitute a minor industrial planet. See the planetary survey.

VII. Kaha'lar: A Class-M world, 8,658 miles in diameter with a huge moon, the system is considered a double-planet system by many astronomers. This world is home to a violent, humanoid, warrior species (unrelated to the Rigellians) who live at a TL3 level and are under Prime Directive protection. The planet is off-limits to outsiders and the Rigellian National Guard maintains a patrol in orbit to prevent outside interference. Star Fleet and the Rigellians sent covert research teams to the surface in the past, until one team was discovered and attacked by the natives in Y142. Fears of contaminating the culture canceled further missions.

VIII. Del'harom: A Class-A hot gas giant with 14 moons and dozens of moonlets; some are mined for minerals and metal ores.

IX. Aka'hermon'ka: A Class-B cold gas giant, similar to Neptune, with 11 moons. The moons have various mining stations, and two scientific research outposts.

X. Tel'amoken: Another Class-B cold gas giant, with 12 moons and various mining facilities.

XI. Vor'nak: Another Class-B cold gas giant, with nine moons and various mining facilities.

XII. Gas'lak: A small desert world on the borderline between Class G and Class K, 5,783 miles in diameter. This planet is in an erratic orbit steeply inclined to the rest of the system, and at certain times is within the biozone of the star, enabling humanoids to survive on the surface for short periods. It is rich in dilithium, although mining operations have been limited. Astronomers think it may have been a "rogue" planet that was "captured" by Rigel's gravity at some point in the distant past.

PLANETARY SURVEY: Rigel-IV

I. GENERAL INFORMATION

Status: R'ehhaknnizah'lohna, "Rigel" (Rigel IV), homeworld of the Rigellians, major industrial planet.
Location: Coordinates 2908, Federation.
Mass: 5.861×10^{21} metric tons.
Density: 5.7.
Diameter: 8,059 miles.
Class: M (with high amounts of ultraviolet radiation).
Surface Area: 204 million square miles.
Land Area: 45 million square miles.
Land Area as Percentage of the Surface: 22%.
Surface Gravity: 1.05G.
Mean Surface Temperature: 80°F.
Surface Pressure at Sea Level: 1.07.
Atmosphere Composition: Nitrogen: 79%.
Oxygen: 20%.
Trace Gasses: 1%.
Pollution: Mild in industrial areas.
Orbital Distance: 44 billion miles (475 AU).
Day: 30 hours.
Year: 48,192 local days (60,240 Earth days, 2,510 Earth years).
Axial Tilt: 12°.
Population: 8 billion.

II. BIOSPHERE

A standard Class-M planet, Rigel has three continents, a standard magnetic field, moving tectonic plates, and two small satellites. Local life has adapted to the high levels of ultraviolet radiation from the parent star. However, non-Rigellians who visit or live on the Rigellian homeworld are required to protect themselves with special clothing or advanced sunscreen lotions at all times. The Rigellians, of course, have long since adapted to the condition by a deep darkening of their own skin.

PROFILE

Rigellians are large humanoids, often reaching seven feet or more in height, and are renowned for their strength and stamina. Due to the unusually high UV output of their sun, Rigellians are darkly pigmented. Their skin features a kind of dermal tattooing which shows up as a network of blue lines covering the entire body in a random pattern, and their body hair is often a stark white in coloring.

Rigellians are genetically almost identical to Earth humans and can interbreed with them without medical intervention. They live 120-130 years with good medical care and nutrition.

Rigellian

11 points

Attribute Modifiers: ST+2 [20].
Secondary Characteristic Modifiers: FP+2 [6].
Advantages: Combat Reflexes [15]; Rapid Healing [5].
Perk: Ultraviolet Tolerance [1].
Disadvantages: Fanaticism (Spread of civilization) [-15]; Honesty (12) [-10]; Sense of Duty (To Family) [-5]; Truthfulness (12) [-5].
Quirk: Humble [-1].

Most Rigellians will add Federation Standard as a known language in addition to their native language.

III. HISTORY OF RIGEL

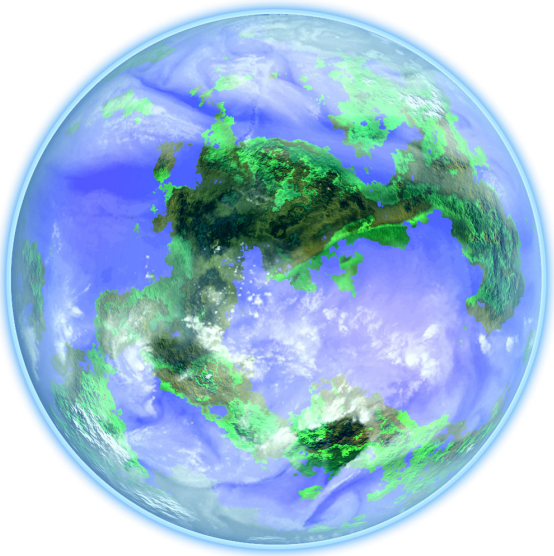
Virtually no Class-B supergiant stars have habitable planets capable of supporting sentient, carbon-based life. Normally such stars do not live long enough for life to develop, at least beyond the level of bacteria, even on planets within the liquid-water habitable zone. Rigel is a very rare exception: the system contains three habitable planets with oxygen/nitrogen atmospheres and thriving biospheres. How these planets developed is a major mystery of astrophysics, one not helped by the erratic orbit of the rogue planet Gas'lak.

Millions of years ago, an unknown but very powerful alien group of beings (apparently not the Old Kings) terraformed the fourth, fifth, and seventh planets of the Rigel system to Class-M standards. Numerous plant and animal species were transplanted to Rigel from other worlds, perhaps as some sort of experiment. (There are biologists who have made entire careers identifying the sources of various plant and animal species.) Among the species were a population of primitive Homo sapiens from Earth, seeded on the fourth world of the Rigel system. Archeologists date the transplant as occurring approximately 100,000 years ago, about 30,000 years after anatomically modern humans evolved on Earth. The dark pigmentation of Rigellians is an evolutionary adaptation to the high ultraviolet radiation of their homeworld.

Rigellian society evolved along parallel lines with that of Earth, progressing through the Stone, Bronze, and Iron ages, with hunter/gatherer societies eventually developing agriculture concurrent with the rise of city-states. Although there were occasional conflicts over resources, for the most part Rigellian society evolved in a more peaceful manner than on Earth, especially over the last 2,000 years.

Technological development was generally slightly more advanced than on Earth: the Rigellians developed powered atmospheric flight in -Y235, and first reached out into space with chemical rockets in -Y190. Aside from brief diplomatic contacts, they had few dealings with the Old Kings and learned little about them. Rigellian interstellar exploration ships with primitive faster-than-light drive were first launched in -Y34. The Vulcans were the first species contacted, and relations between the two peaceful species were cordial.

When the Vulcans and Earth humans began discussions about forming a "Federation of Planets" in Y1, the Rigellians were enthusiastic supporters of the concept. It was assumed by the idealistic Rigellians that interstellar species were, by nature, peaceful. The Primacy Fathers and members of the society in general were later aghast to discover the nature of some other interstellar societies, especially the Klingons and Romulans. They were horrified to find that advanced interstellar empires were founded on the principles of conquest and enslavement, principles abhorrent to modern Rigellian culture. This caused so much of a cultural fervor that within the first decades of Rigellian membership in the Federation, a full 30% of the population applied to join Star Fleet. Even today, while Humans represent the largest numerical component in the Federation and Star Fleet, the Rigellians have, by far, the largest proportion of their population in Federation service.



IV. CULTURE OF RIGEL-IV

Government: The Rigellian world government is controlled by an organization known as the Primacy Council. In modern times, representatives from all the city-states have seats in the Council, with a controlling hand offered by the Primacy Fathers and Mothers. Each of the city-states is also governed by Lesser Primacy Groups, who are directly answerable to the Primacy Fathers and Mothers. Elections are democratic, and the government corresponds to Federation norms at all levels.

Society: Rigellians are strongly bound by the notions of "Family and Honor." Family ties are unusually strong in Rigellian culture, with three or more generations often living and working together. Rigellians mate for life, and husbands and wives never separate, nor do they re-mate if their spouse dies. A Rigellian's word is his bond, and the whole family shares in the dishonor of any family member's breaking of an oath. Crime and dishonesty are virtually unheard of in Rigellian culture, and families provide for the material and emotional needs of their members.

Economy: A standard Federation mixed economy, and extremely dynamic. Shipbuilding, industrial manufacturing, and medical research are three areas where the Rigellians feel they have specific expertise. Rigellians are among the most aggressive traders in the Federation. Unlike many Orions or Humans, however, the Rigellians tend to be scrupulously honest, although there are a few exceptions.

Laws: Rigellian laws were very much in line with "human" norms and required little adjustment when Rigel joined the Federation.

Religion: There are two major religions on Rigel, plus a large number of smaller sects and cults. About 20% of the population are secular atheists or agnostics. About 40% are Nezh'ites, a non-theist spiritual philosophy similar in many ways to Terran Buddhism. Another 30% are Zyhrnoks, worshipping the benevolent monotheistic creator god Zhyrank. Both the Nezh'hite and Zyhrnok philosophies are nonviolent and tolerant of other religions; it has been at least two millennia since the last religious war on Rigel. The remaining 10% of the population are adherents of smaller religions and cults, including those from other planets.

Both major religions emphasize a strict code of personal conduct. Gambling, drinking, adultery, and fornication are serious sins in the eyes of most (although not all) Rigellians. Acts of violence, especially murder, are sharply condemned. At the same time, neither religion is truly pacifist; force can be used to protect the innocent from exploitation or harm. Generally speaking, Rigellians will never throw the first punch in a fight, will go out of their way to seek a peaceful resolution to a conflict, and will follow the "Rules of War" to the letter. But if force is truly the only option, Rigellians will indeed use it, and use it well.

Planetary Survey: Thell'naar (Rigel II)

I. GENERAL INFORMATION

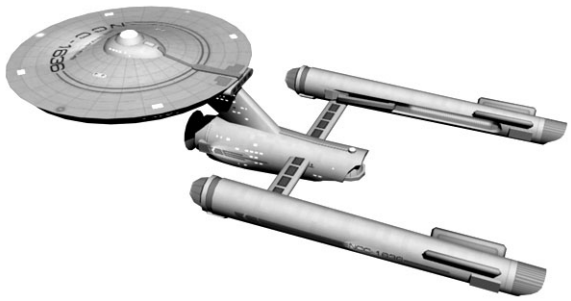
Status: Minor industrial planet.
Location: Coordinates 2908, Federation.
Class: A.
Orbital Distance: 27 billion miles (295 AU).
Year: 1,229 Earth years.
Population: 725 million.

II. BIOSPHERE

A large gas giant similar to Jupiter but with 3.5 times more mass, Thell'naar has 34 large moons and dozens of smaller moonlets. Most of the moons are mineral rich, with major deposits of gold, platinum, manganese, iridium, and serium.

III. HISTORY, CULTURE, AND ECONOMY

Thell'naar's moons host dozens of domed cities devoted to mining and manufacturing. A large orbital habitat, Crownport, is home to many casinos and a huge "red-light" district, catering to visiting Star Fleet crews as well as miners, factory workers, and Rigellians seeking a change from the relatively strict morality of their homeworld.



Planetary Survey: Yee'laa (Rigel III)

I. GENERAL INFORMATION

Status: Minor industrial planet.
Location: Coordinates 2908, Federation.
Class: A.
Orbital Distance: 3 billion miles (360 AU).
Year: 1,657 Earth years.
Population: 640 million.

II. BIOSPHERE

Another gas giant similar to Jupiter with about 1.5 times the mass, Yee'laa has 31 large moons and dozens of smaller moonlets. Most of the moons are mineral rich, with major deposits of gold, platinum, manganese, and pergium. There are also trace deposits of dilithium.

III. HISTORY, CULTURE, AND ECONOMY

Yee'laa's moons host almost 100 domed cities devoted to mining and manufacturing. A huge orbital factory produces shuttles, fighters, and bombers for Star Fleet and the National Guards.

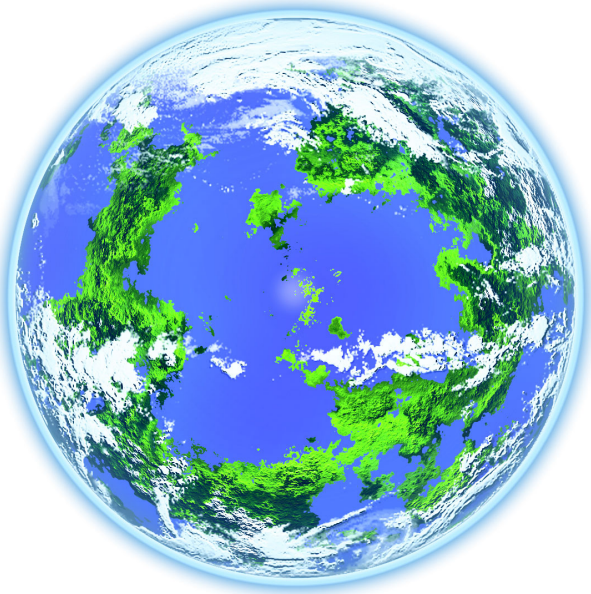
Planetary Survey: Talla-lennakk'haom "Strongport" (Rigel V)

I. GENERAL INFORMATION

Status: Major industrial planet.
Location: Coordinates 2908, Federation.
Mass: 4.067 x 10^{21} metric tons.
Density: 5.5.
Diameter: 7,220 miles.
Class: M (with high amounts of ultraviolet radiation).
Surface Area: 164 million square miles.
Land Area: 62 million square miles.
Land Area as Percentage of the Surface: 38%
Surface Gravity: 0.905G.
Mean Surface Temperature: 70°F.
Surface Pressure at Sea Level: 0.75.
Atmosphere Composition: Nitrogen: 77%.
Oxygen: 22%.
Trace Gasses: 1%.
Pollution: Mild in industrial areas.
Orbital Distance: 49 billion miles (530 AU).
Day: 24 hours.
Year: 2,959 Earth years.
Axial Tilt: 15°.
Population: 2 billion.

II. BIOSPHERE

This is a Class-M world, although somewhat drier than Earth. As with the homeworld, Strongport was apparently terraformed by a precursor species millions of years ago and seeded with life from other parts of the galaxy, although there was no sentient life present until the arrival of Rigellian colonists in -Y85. The level of ultraviolet radiation is rather high, as it is on the homeworld, and non-Rigellians need to use protection if they intend to be outdoors for more than a few hours at a time.



III. HISTORY, CULTURE, AND ECONOMY

Called "Talla-lennakk'haom" in the Rigellian language, this world is known as "Strongport" (a loose translation) in Federation standard, as well as simply "Rigel V." Strongport is home to a large orbital shipyard complex, the Tacoma-Rigel Shipyard, building starships for the Federation. Jointly managed by a Human and Rigellian industrial consortium, this facility employs hundreds of thousands of people, and millions more support its operations indirectly. The planet is also home to one of the Federation's most important medical research facilities.

Planetary Survey: Filii'lon (Rigel VI)

I. GENERAL INFORMATION

Status: Minor industrial planet.
Location: Coordinates 2908, Federation.
Class: B.
Orbital Distance: 58 billion miles (625 AU).
Year: 3,790 Earth years.
Population: 150 million.

II. BIOSPHERE

A large Class-B cold gas giant, Filii'lon has 10 moons, eight of them very rich in minerals. Mining colonies exist on the moons, but are self-contained with artificial gravity and atmosphere similar to that of Rigel-IV or Rigel-V.

III. HISTORY, CULTURE, AND ECONOMY

The moons are home to an extensive mining and refining operation supporting the Tacoma-Rigel Shipyard at Strongport. The largest moon is Na'than, which serves as the planetary capital.

HEIGHT AND WEIGHT RANGES

Species	Height Range	Weight Range
Alpha-Cent., male	5' 2"-6' 8"	124-280 lbs.
Alpha-Cent., female	4' 10"-6' 4"	89-245 lbs.
Andorian, male	5' 2"-6' 8"	124-280 lbs.
Andorian, female	4' 10"-6' 4"	89-245 lbs.
Antarean, male	5' 2"-6' 8"	124-280 lbs.
Antarean, female	4' 10"-6' 4"	89-245 lbs.
Arcturian, male	4' 11"-5' 6"	112-174 lbs.
Arcturian, female	4' 6"-5' 1"	72-134 lbs.
Brecon, male	6' 11"-8' 1"	184-372 lbs.
Brecon, female	6' 9"-7' 11"	159-347 lbs.
Cygnan, male	5' 2"-6' 8"	124-280 lbs.
Cygnan, female	4' 10"-6' 4"	89-245 lbs.
Deian, male	5' 2"-6' 8"	124-280 lbs.
Deian, female	4' 10"-6' 4"	89-245 lbs.
Dunkar, male	5' 2"-6' 8"	124-280 lbs.
Dunkar, female	4' 10"-6' 4"	89-245 lbs.
Fralli, male	5' 2"-6' 8"	119-275 lbs.
Fralli, female	4' 10"-6' 4"	84-240 lbs.
Gorn, male	5' 10"-7' 4"	184-420 lbs.
Gorn, female	5' 8"-7' 2"	154-390 lbs.
Human, male	5' 2"-6' 8"	124-280 lbs.
Human, female	4' 10"-6' 4"	89-245 lbs.
Hydran, all genders	3' 11"-4' 11"	139-279 lbs.
Klingon, male	5' 2"-6' 8"	124-280 lbs.
Klingon, female	4' 10"-6' 4"	89-245 lbs.
Kzinti, male	6' 10"-7' 8"	179-319 lbs.
Kzinti, female	6' 8"-7' 6"	154-294 lbs.
Lyran, male	5' 2"-6' 8"	124-280 lbs.
Lyran, female	4' 10"-6' 4"	89-245 lbs.
Mantorese, male	5' 6"-6' 0"	224-316 lbs.
Mantorese, female	5' 5"-5' 11"	219-311 lbs.
Mynieni, male	3' 9"-4' 3"	74-134 lbs.
Mynieni, female	4' 2"-4' 8"	99-159 lbs.
Orion, male	5' 2"-6' 8"	119-275 lbs.
Orion, female	4' 10"-6' 4"	84-240 lbs.
Prellarian, male	3' 7"- 4' 1"	144-204 lbs.
Prellarian, female	3' 5"-3' 11"	114-174 lbs.
Rigellian, male	6' 4"-7' 10"	134-290 lbs.
Rigellian, female	5' 10"-7' 4"	94-250 lbs.
Romulan, male	5' 2"-6' 8"	224-380 lbs.
Romulan, female	4' 10"-6' 4"	149-305 lbs.
Slirdarian, male	6' 10"-7' 8"	154-294 lbs.
Slirdarian, female	6' 8" - 7' 3"	134-274 lbs.
Skolean, male	4' 9"-5' 3"	119-179 lbs.
Skolean, female	4' 8"-5' 2"	104-164 lbs.
Tellerite, male	4' 11"-5' 5"	194-286 lbs.
Tellerite, female	4' 9"-5' 3"	104-196 lbs.
Tholian, all genders	4' 7"-6' 1"	74-310 lbs.
Vulcan, male	5' 2"-6' 8"	224-380 lbs.
Vulcan, female	4' 10"-6' 4"	149-305 lbs.

ZORSKI'S INTERSPECIES COMPATIBILITY TABLE

Group I-a (humans): Alpha-Centaurans, Deians, Humans, Rigellians
Group I-b (near-human): Brecon, Cygnans, Prellarians, Yitlians, Zoolies

Group II (other iron-blooded humanoids): Arcturians, Bargantines, Cromargs, Dunkars, Klingons, Mantorese, Tellarites, Veltressai

Group III-a (copper-blooded): Romulans, Vulcans
Group III-b (copper-blooded): Andorians, Antareans, Fralli, Orions

Group IV-a (felinoid mammals): Carnivons, Kzintis, Lyrans
Group IV-b (other felinoid mammals): Korlivilar
Group IV-c (omnivores): Ranel, Slirdarians
Group IV-d (aquatic mammals): Phelan, Rovillians
Group IV-e (flying mammals): none yet known

Group V-a (avians): Paravians
Group V-b (cold-blooded reptiles): Gorns, Hilidarians, Prounhoulites
Group V-c (warm-blooded reptiles): Skoleans, Vudar

Group VI-a (crustaceans): Vergarians
Group VI-b (insectoids): Seltorians
Group VI-c (invertebrates): Jindarians, Mynieni

Group VII (undifferentiated): none yet known

Group VIII-a (ammonia-breathers): Q'Naabians
Group VIII-b (chlorine-breathers): none yet known
Group VIII-c (fluorine-breathers): none yet known

Group IX-a (methane-breathers): Hydrans
Group IX-b (hydrogen-breathers): none yet known

Group X (uniques): Tholians

Other Federation Member Planets

These are planets of the Federation which are not inside the capital district.

Antares

SYSTEM SURVEY: Antares

Star Classes:

Antares (G3V yellow dwarf, 1.05 stellar mass);
Companion Star B (M1V red dwarf companion, 0.45 stellar mass) at 47 AU;
Companion Star C: (M2V red dwarf companion, 0.39 stellar mass) at 79 AU.

Note that this "Antares" is not the same star called Antares by 21st-century human astronomers. The historical Antares is a red supergiant star about 600 light years from Sol, in the same ***F&E*** hex. The name similarity is coincidental. The Antareans call their star "Antar-eane'se" which translates as "source of life" in their native language but sounds very much like "Antares" to human ears.

Planets of Antares

I. Pokares: Class-C hothouse, similar to Venus, 7,398 miles in diameter.

II. Rojares: Class-F planet with sulfurous atmosphere, 6,982 miles in diameter.

III. Uvares: Class-D rock with a very thin atmosphere, 4,289 miles in diameter. This planet is mined for minerals and has a population of almost a million living in domed cities.

IV. Antares: Antarean homeworld. See the planetary survey.

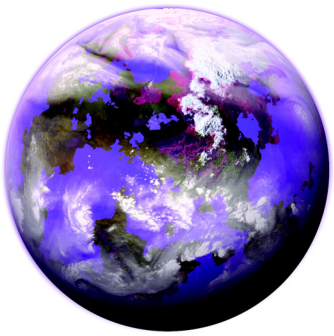
V. Zopores: Class-A gas giant, similar to Saturn but without rings, with 34 moons, 21 of which are mined for resources.

A: Asteroid belt, with some mining operations.

VI. Doraves: Class-B cold gas giant, with 19 moons, some of which are mined.

K: There are numerous Kuiper Belt objects, two of which have scientific outposts and one of which has a military scanning post.

The companion stars have no true planets but host a variety of proto-planets, planetoids, and asteroids, some of which are mined for resources.



PLANETARY SURVEY: Antares

I. GENERAL INFORMATION

Status: Homeworld of the Antareans, minor industrial world.
Location: Coordinates 2610, Federation.
Mass: 4.546 x 10^{21} metric tons.
Density: 5.9.
Diameter: 7,320 miles.
Class: M.
Surface Area: 168 million square miles.
Land Area: 57 million square miles.
Land Area as Percentage of the Surface: 34%.
Surface Gravity: 0.985G.
Mean Surface Temperature: 65°F.
Surface Pressure at Sea Level: 0.97.
Atmosphere Composition: Nitrogen: 79%.
Oxygen: 20%.
Trace Gasses: 1%.
Pollution: Mild in industrial areas.
Orbital Distance: 103 million miles (1.11 AU).
Day: 25 hours.
Year: 399.3 local days (416 Earth days, 1.14 Earth years).
Axial Tilt: 25°.
Population: 7 billion.

II. BIOSPHERE

Antares is a typical Class-M planet, with a diverse and thriving biosphere.

PROFILE

The Antareans are closely related to the Andorians, and are in Zorski Group III-b. They resemble their Andorian cousins, but over the last 100,000 years they have evolved in a different environment. Antareans have a greater variety of skin and hair colors, and their physical dexterity is slightly better, but they lack the enhanced olfactory senses of Andorians and their antennae are smaller on average. The two species share more than 99.5% of their DNA and are capable of interbreeding, but for cultural reasons they seldom do so.

Antarean

40 points

Secondary Characteristic Modifiers: Per+2 [10].
Advantages: Acute senses (Hearing) 1 [2]; Discriminatory Hearing [15]; High Manual Dexterity 2 [10]; Parabolic Hearing 1 [4]; Vibration Sense [1].
Disadvantages: Low Pain Threshold [-10].
Quirks: Distracted by loud or unusual noises [-1].

Most Antareans will add Federation Standard as a known language in addition to their native language.

III. HISTORY OF ANTARES

Humans are not the only species that have been "seeded" on other worlds by highly advanced precursor beings. About 100,000 years ago, primitive Andorians were taken from their homeworld and seeded here. It is unknown

who did this; it may, or may not, have been the same beings who seeded humans and humanoids among the stars.

The Antareans evolved in a very different environment than the Andorians; their world is much warmer than Andor, with more plentiful food resources. This resulted in the development of some physical differences between the two species, but cultural differences are far more prominent. While Andorian culture is based on the cooperative tyk, Antareans are much more individualistic.

Antarean culture progressed through the usual humanoid pattern of Stone, Bronze, and Iron ages. Empires rose and fell; societies grew, prospered, stagnated, and collapsed. By Y0, the Antareans had formed a planetary government and reached TL8.

The Antareans had explored their solar system and were beginning to fund a program for faster-than-light travel when a Rigellian exploration ship discovered the system in Y79. The Rigellians immediately contacted the nearest Andorian vessel to inform the Andorians of the discovery of an apparently related species. The Andorians raced to the scene, anxious to make First Contact with new brothers and sisters.

The meeting did not go well. It quickly became apparent that their cultures were radically different. Worse, the discovery of the Andorian/Antarean connection, and archeological confirmation that the culture on Andor came first, utterly destroyed the validity of the most sacred Antarean religious scriptures or at least the literal interpretations thereof. This caused a massive social upheaval, made worse due to the bungling, if well-meaning, attempts of Federation representatives to ameliorate the situation. In Y87, the newly elected Antarean government, dominated by religious fundamentalists, expelled all Federation citizens and declared strict neutrality.

But the genie was out of the bottle and knowledge of the outside galaxy could not be stamped out. A brief but bitter civil war saw the overthrow of the fundamentalist government, and the installation of a secular military junta led by Arch-Marshal Melal Takruta. The Antarean military realized that the galaxy was a dangerous place, and that Federation membership would be the best protection for the Antarean people.

Under Takruta's leadership, Antarean society became increasingly secular. Broad interpretations of ancient scriptures were taught in the schools and churches. Takruta's rule was strongly authoritarian in the early years. He reestablished diplomatic relations with the Federation in Y91, then signed a treaty of friendship and trade in Y99. Although the authoritarian nature of the government precluded formal membership, trade between Antares and the Federation was lively.

Social and political controls were eventually eased, and Takruta retired as head of the junta in Y124, allowing free elections under Federation supervision. An attempted military coup by hard-line militarists in Y134 was easily defeated. A counter-coup by religious fundamentalists in Y135 was also defeated, showing the strength of the "moderate middle," and Antarean society entered the Federation mainstream. They became probationary members in Y137, prospective members in Y148, and associate members in Y155.

Antares is now an enthusiastic member of the Federation. Ironically, given their biological heritage, most Antareans prefer the company of Humans and Rigellians and don't get along particularly well with Andorians. The feeling is mutual; Antarean petitions for full membership have been blocked by the Andorians on several occasions.

IV. CULTURE OF ANTARES

Government: The Antarean Constitution promulgated by Arch-Marshal Takruta embodies a strong, centralized, but representative, form of government, with a powerful executive elected every six years by popular vote. The Chamber of Citizens, elected every three years, is the representative legislature, and serves to check the power of the presidency through control of the purse. The government structure required significant adjustment before the Antareans were eligible for Federation membership.

Society: More similar to human society than Andorian society, the Antareans tend to be somewhat individualistic in the sense that power is perceived as residing more in the individual, not in the group. Yet at the same time, there is pressure to conform and rally behind a strong "leader" figure as the embodiment of individual virtue. Antareans would tend to identify more with Alexander Hamilton or, in extreme cases, Napoleon Bonaparte, as exemplars of political and social wisdom, rather than Thomas Jefferson. This tension between individuality and respect for the "man on horseback" seems contradictory to many humans, but makes perfect sense to the Antareans.

Economy: Dynamic and very capitalist. The social "safety net" had to be beefed up substantially to meet Federation

Continued on page 102.

Arcturia

SYSTEM SURVEY: Arcturia

Star Classes: This is a binary system with two stars.

Arcturia: K1V orange dwarf (0.84 stellar mass);

Companion star B: M9V red dwarf (0.34 stellar mass).

Arcturia is not the star known to Earth astronomers as "Arcturus," which is a red giant star only 36.7 light years from Sol (in the same ***F&E*** hex as Earth), while Arcturia is thousands of light years distant.

Planets:

I. Mantoria: Class-I hot rock, similar to Mercury, 5,871 miles in diameter. This planet is mined for minerals.

II. Arcturia: Arcturian homeworld. See the planetary survey.

III. Saluria: Class P, a frozen world with glaciers of carbon dioxide slush, 7,187 miles in diameter.

IV. Poltaria: Huge Class-A hot gas giant, almost a brown dwarf, with 37 moons of various sizes. Most of them are mined for minerals.

A: There is an extensive asteroid belt between Poltaria and Caloria.

V. Caloria: A smaller Class-A hot gas giant without rings. There are nine large moons, three of which host important research facilities.

VI. Fridoria: Class-B cold gas giant with six moons.

VII. Nantoria: Class-B cold gas giant with three moons.

PLANETARY SURVEY: Arcturia

I. GENERAL INFORMATION

Status: Homeworld of the Arcturians, minor industrial world.
Location: Coordinates 2715, Federation.
Mass: 7.664 x 10^{21} metric tons.
Density: 5.35.
Diameter: 9,001 miles.
Class: M.
Surface Area: 255 million square miles.
Land Area: 59 million square miles.
Land Area as Percentage of the Surface: 23%.
Surface Gravity: 1.10G.
Mean Surface Temperature: 65°F.
Surface Pressure at Sea Level: 0.90.
Atmosphere Composition: Nitrogen: 76%.
Oxygen: 23%.
Trace gasses: 1%.
Pollution: Mild in industrial areas.
Orbital Distance: 73 million miles (0.785 AU).
Day: 19 hours.
Year: 350 local days (277 Earth days, 0.759 Earth years).
Axial Tilt: 19°.
Population: 7 billion.

II. BIOSPHERE

Typical Class M, with a diverse and thriving biosphere. There are six continents, plus many islands. The planet has no moon, and the nights are very dark.

PROFILE

Arcturians are a humanoid species unrelated to humans. With their large eyes (well adapted for the moonless nights) and slight features, the Arcturians can best be described as being similar in appearance to the elves found in Human folklore. Arcturians are a small, yet hardy, species. They rarely exceed 5.5 feet in height, and they average 120 pounds. Their pointed ears give them some physical resemblance to Vulcans, but they are not vulcanoids and have their own unique physiology and biochemistry. They cannot breed with other humanoids without medical intervention.

Arcturians reach sexual physical maturity at age 15 and live 70-90 Earth years with proper medical care and nutrition. They are mammals with two sexes, and bear their young in the usual way. Very, very few Arcturians have any psionic ability. Those who do would be treated as genetic freaks by their own people.

Centuries of relying on their intelligence rather than their size helped Arcturians develop a proficiency in martial arts. Star Fleet has added Sincaht, an Arcturian martial arts philosophy, to the curriculum at Prime Central. All Arcturians in Star Fleet are trained in Sincaht and are well able to defend themselves.

Arcturian

40 points

Attribute Modifiers: ST-1 [-10]; DX+2 [40].
Advantages: Night Vision 5 [5].
Secondary Characteristic Modifiers: Basic Speed +1 [20].
Disadvantages: Pacifism (Self-Defense Only) [-15].

Most Arcturians will add Federation Standard as a known language in addition to their native language.

III. HISTORY OF ARCTURIA

The Arcturians evolved on their homeworld from a precursor species of tree-dwelling primates. The first anatomically modern specimens appear in the fossil record about 180,000 years ago. As is usual for a humanoid species, they progressed through the Stone, Bronze, and Iron ages, developed agriculture and primitive industry, and fought wars amongst themselves.

The Arcturians reached TL5-6 about the year -Y500, then fought a series of devastating wars between rival nation-states. Although nuclear physics was not well understood at this point, thankfully preventing the development of atomic weapons, the wars were extremely destructive and set societal progress back hundreds of years, particularly after the outbreak of a horrific plague in -Y472. About one-third of the planetary population died by -Y467. Whether the plague was an engineered bioweapon or simply a virulent natural mutation of a common illness was never determined.

Following the last wars and the plague, most Arcturians adopted a new philosophy of peace and brotherhood, working hard to set aside their past differences over ethnic and religious matters. This took time and not everyone agreed,

but gradually tensions between various ethnic and social groups and nation-states eased. The World Council, originally formed as a U.N.-like forum for debate and to ease tensions, gradually took on more and more authority, until a unified world government was established in -Y147. Resources were poured into environmental and medical research. Space travel was considered impractical for decades, and the Arcturians did not begin seriously exploring their solar system until Y22.

When the Federation starship *Alaric* made First Contact in Y133, the Arcturians were on the verge of developing warp drive. They signed a treaty of friendship and trade in Y136, then formally applied for membership in the Federation in Y149. Accepted as probationary members the following year, they became prospective members in Y155 and associate members in Y160.

Arcturians are found in all sections of Star Fleet. The vast majority of Arcturians are philosophical pacifists and will only fight in self-defense. They tend to gravitate to the scientific and medical specialties, and toward the diplomatic corps. However, Arcturians of the Ferkite religious order are trained from birth as warriors and do not share the pacifism disadvantage of their brethren. Many of these serve in the Star Fleet Marines and in the Special Forces. Some serve on Prime Teams. Sadly, a few members of the Ferkite order have joined the Orion Pirates.

Arcturus was occupied by the Klingons for several years during the General War. Most Arcturians accepted this stoically; the Ferkites did not.

IV. CULTURE OF ARCTURIA

Government: The World Council is a parliament with representatives elected from the 124 provinces, which correspond closely to old nation-state boundaries. The World Chairman elected by the Council is the head of government and state. Elections are held every seven years, or sooner if political coalitions collapse.

Society: Open and cosmopolitan, typical of the Federation. Family structure is similar to the humanoid norm, although extended families normally live under the same roof (brothers, sisters, parents, and grandparents) more than they do in human society.

Economy: Free-market capitalist, though the social sector in Arcturian society is even more robust than the standard Federation norm.

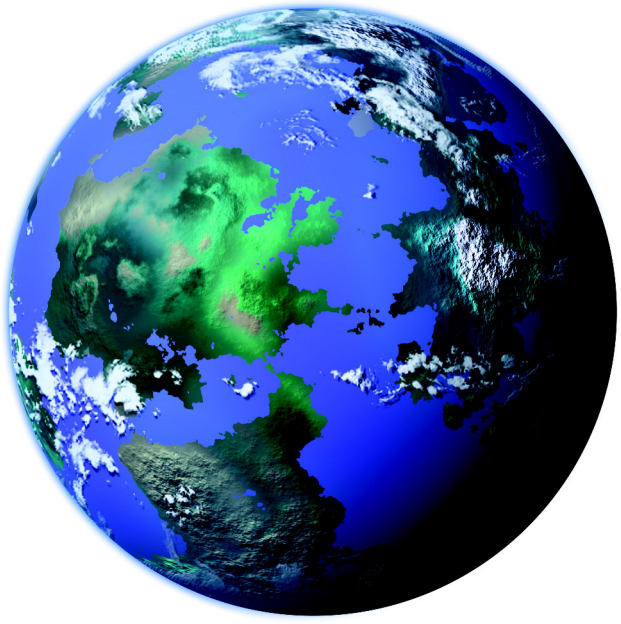
Laws: Arcturian laws respect sentient rights and took little adjustment to comply with Federation principles.

Religion: There are two major Arcturian religions and various smaller subgroups, sects, and cults. About 30% of modern Arcturians are atheists or agnostics or only casually religious. About 60% divide more or less equally between the two major religions.

Pergans believe that the universe was created jointly by God and Goddess, who then sat back and watched it run without interference. This belief is rather deistic. Pergans do not pray for active intervention or help from the Twin Deities, but believe that ethical and righteous behavior will be rewarded by the Twin Deities with bliss in the afterlife. The more moral and righteous one is in this life, the more bliss one will experience in the next. Most Pergans are pacifists.

Rolna'n is a pantheistic faith which posits that the universe itself is God or a part of God. Rolna'nites believe that one should cultivate "consciousness" as much as possible in life. How this consciousness is defined varies from sect to sect, but virtually all Rolna'nites are peaceful and pacifistic.

The most important smaller religion is the Ferkite Order. An offshoot of Perganism, the Ferkites worship the male warrior god Fer and the female warrior goddess Fere, who fight an unending battle against evil and corruption in the universe. Making up about 5% of the population, Ferkites are not pacifists and many of them end up in military or law enforcement professions. A few rogue Ferkites become criminals (including a few in the Orion Pirates), ignoring the religious precepts to fight for good, and devoting their skills toward selfish gain.



Brecon

SYSTEM SURVEY: Brecolaris

Star Classes: This is a binary system, consisting of two G6V yellow dwarf stars in a stable orbit separated by about 0.12 AU. The orbit of the two stars is highly circular and stable. The star system has seven planets which orbit the center of mass between the two stars.

G6V yellow dwarf (1.01 stellar mass);
G6V yellow dwarf (0.98 stellar mass).

Planets

I. Arcon: Class-O hothouse, similar to Venus, 6,987 miles in diameter.

II. Zercon: Another Class-O hothouse, slightly cooler than the first but still uninhabitable, 7,100 miles in diameter.

III. Brecon: Brecon homeworld. See the planetary survey.

IV. Pudcon: Class-G cold desert world, similar to Mars but somewhat larger and with a slightly thicker atmosphere, 6,003 miles in diameter. There are several domed, research colonies here.

A1: Asteroid belt, extensively mined.

V. Telcon: Class-A gas giant, slightly larger than Jupiter, with five large moons and numerous smaller moonlets. There is an extensive mining operation on the moons.

A2: Asteroid belt, extensively mined.

VI. Forcon: Class-B cold gas giant, typical Neptune type. There are four moons mined for resources.

VII. Jolcon: Class-B cold gas giant, very similar to Forcon, with three moons.

PLANETARY SURVEY: Brecon

I. GENERAL INFORMATION

Status: Homeworld of the Brecon, a minor planet.
Location: Coordinates 3214, Federation.
Mass: 5.099 x 10^{21} metric tons.
Density: 5.6.
Diameter: 7,739 miles.
Class: M.
Surface Area: 188 million square miles.
Land Area: 58 million square miles.
Land Area as Percentage of the Surface: 31%.
Surface Gravity: 0.98G.
Mean Surface Temperature: 79°F.
Surface Pressure at Sea Level: 1.10.
Atmosphere Composition: Nitrogen 76%.
Oxygen 21%.
Argon: 1%.
Trace Gasses: 2%.
Pollution: Moderate in industrial areas.
Orbital Distance: 92 million miles (0.99 AU).
Day: 26 hours.
Year: 339 local days (367 Earth days, 1.005 Earth years).
Axial Tilt: 18°.
Population: 7 billion.

II. BIOSPHERE

A very typical Class-M world, with three large continents, numerous islands, moving tectonic plates, a standard magnetic field, and two moons.

PROFILE

The Brecon are four-armed, golden-skinned humanoids of average build with a typical height between seven and eight feet tall.

Biologically, the Brecon are humanoid but not human. They evolved independently on their homeworld and were not "seeded" on it. They are similar enough biochemically to humans that they rate as "near human" on the Zorski scale, but their structural physiologies are quite different and interbreeding with humans is impossible without medical help. Aside from the obvious outward difference (four arms), the Brecon are dissimilar internally to Humans; they have two livers, for example, as well as two stomachs and four kidneys.

They have a typical mammalian life cycle, and live 100-120 years with proper nutrition and medical care.

Brecon

45 points

Secondary Characteristic Modifiers: SM+1.
Advantages: Extra Arms 2 [20]; Extra Attack [25].

Most Brecon must choose either Grenpahk or Sorel as their native language and add the other as a known language. Most Brecon will also add Federation Standard as a known language.

III. HISTORY OF BRECON

Anatomically modern Brecon first emerged about 200,000 years ago, evolving from a precursor species of social primates. The species gradually moved through the Stone, Bronze, and Iron ages, developing tool-making, agriculture, and eventually city-states, as is typical of most humanoid species. Violence was common for most of Brecon history, especially between the two main ethnic groups: the Grenpahk and the Sorel.

The main physical difference between the two groups was hair color, but there were massive disagreements in regards to culture, language, religion, and social organization. These disputes were frequently vicious and savage wars between the Grenpahk and the Sorel were the main driving force behind Brecon history.

This came to a head with the development of TL6-7 technology and resulting advancements in weaponry. In -Y217, a world war broke out between the Grenpahk and Sorel. This included widespread use of chemical weapons, limited use of biological warfare, and, in the last year, deployment of the first primitive atomic-fission weapons. The war lasted nearly 20 years, resulting in millions of deaths, massive economic and social dislocation, and significant environmental degradation.

The war finally ground to a halt due to mutual economic exhaustion, although scientists on both sides were racing to develop thermonuclear-fusion bombs as a final

"war-winning" weapon. At this point, factions on both sides finally realized that weaponry had grown so destructive that a way had to be found to live together, or else civilization itself could be destroyed once the fusion weapons were perfected. This was a perfect example of a "techno-social maturation crisis" as described by Hodgkin and Richter.

Fortunately for the Brecon, this crisis was resolved by the Jyrahk Accord. This agreement stated that, to ensure ethnic differences would never again cause them to go to war, both ethnicities would have equal standing and representation in all endeavors.

Following ratification of the Accord in -Y178, the Brecon focused on rebuilding and developing peaceful technology. They began space exploration with chemical rockets in -Y57. Eventually they established permanent installations on their two moons, and then launched a series of signal beacons and sublight space probes, hoping to contact other species, beginning in Y78. Brecon scientists attempted work on FTL drives, but made little progress.

For nearly 70 years they received no replies to their beacons and probes until the Federation Cruiser *Farragut* arrived in the system in Y148, a mere three weeks before the signals would have ceased forever due to cost and apparent failure of the concept.

The Brecon quickly applied for Federation membership. They were accepted as probationary members in Y152, prospective members in Y157, and became associate members in Y161. In most cases, Brecon will join Star Fleet (or other off-world endeavours) in pairs, one from each of the political groups, but those who are Rejectionists (see *Society*) do not consider this necessary.

IV. CULTURE OF BRECON

Government: The Unity Council manages planetary affairs, and is evenly divided between 20 Grenpahk members and 20 Sorel members. The Chairmen of the Council serve as heads of state and government, and are selected every two years from among the members of the Council. There are always two Chairmen, one from each ethnic group. The legislature generates laws, which are then approved (or vetoed) by the Unity Council; there are 2,000 seats in the legislature, evenly divided between Grenpahk and Sorel. At all levels of government, authority and responsibility is divided as evenly as possible between the two ethnic groups.

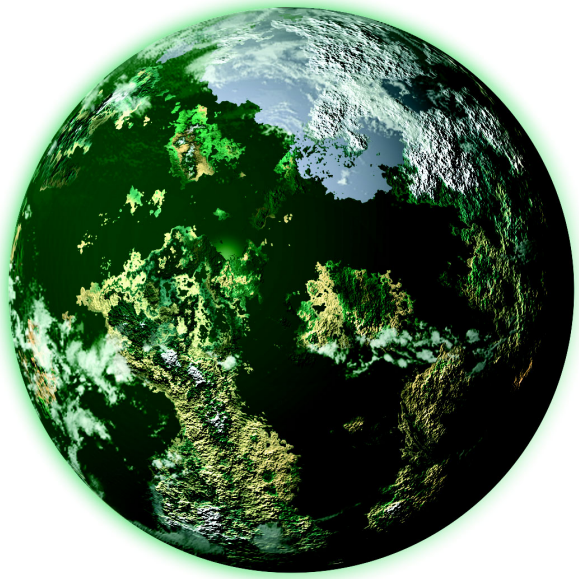
Society: Much more open than before the Jyrahk Accord. Brecon marriages are between four individuals: two men and two women. Sometimes these will be from one group, and sometimes it will include a member or two from both. Brecon children are required to learn both Grenpahk and Sorel languages and to be familiar with and respect the religious and cultural beliefs of both sides. Federation sociologists point out that the cultural distinction between the two ethnic groups is blurring to some extent.

There are a small number of Brecon "Rejectionists" who refuse to accept the Jyrahk Accords. They are ostracized from mainstream society and encouraged to emigrate to small off-world colonies, where they can enjoy their "ethnic purity" without hurting anyone.

Economy: Free market, with ethnic balance.

Laws: The Brecon legal code, adopted as part of the Jyrahk Accord, emphasizes social and political rights, and fits in well with Federation requirements.

Religion: Religious differences were a major factor in the conflict. The Grenpahk religion is polytheistic, recognizing numerous gods and goddess dealing with the various facets of life. The Sorel religion is monotheistic. Before the Jyrahk Accord, factions within both religions accepted the principle of forced (often violent) conversion and ethnic cleansing. Following the Jyrahk Accord, religious leaders of both sides eventually agreed to tone down the violent interpretations of their various sacred texts and adopt the more peaceful view. A minority of both sides refused to accept this, forming the core of the Rejectionist movement.



Cygnus

SYSTEM SURVEY: Shresha

Star Class: Shresha (K3V orange dwarf, 0.74 stellar mass).

Planets

I. Grak: Class-D hot rock, 6,109 miles in diameter. This planet is mined for minerals and has domed colonies.

II. Cygnus: Cygnan homeworld, major industrial planet. See the planetary survey.

III. Tonk: Class-A gas giant, slightly larger than Jupiter, with 18 large moons and numerous moonlets. Most of them are mined for resources, and there is a significant dilithium mining operation.

IV. Jarla: Class-A gas giant, slightly smaller than Saturn, with nine large, mineral-rich moons and numerous moonlets. Most of the moons are mined for resources.

V. Quelequa: Class-B cold gas giant, with four large moons and numerous moonlets.

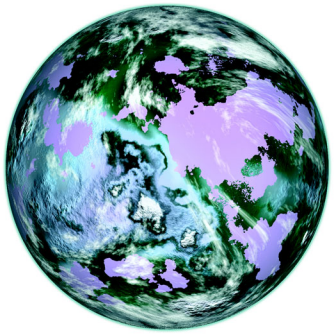
VI. Porkiksha: Class-Q iceball.

PLANETARY SURVEY: Cygnus

I. GENERAL INFORMATION

Status: Homeworld of the Cygnans, major industrial world.
Location: Coordinates 2306, Federation.
Mass: 5.956 x 10^{21} metric tons.
Density: 6.1.
Diameter: 7,921 miles.
Class: M.
Surface Area: 197 million square miles.
Land Area: 49 million square miles.
Land Area as Percentage of the Surface: 25%.
Surface Gravity: 1.10G.
Mean Surface Temperature: 68°F.
Surface Pressure at Sea Level: 1.03.
Atmosphere Composition: Nitrogen: 78%.
Oxygen: 20%.
Argon: 1%.
Trace Gasses: 1%.
Pollution: Mild in industrial areas.
Orbital Distance: 51 million miles (0.55 AU).
Day: 22 hours.
Year: 189 local days (173 Earth days, 0.474 Earth years).
Axial Tilt: 10°.
Population: 7 billion.

II. BIOSPHERE



Typical Class-M world, although due to the low level of ultraviolet radiation most native species have pale skin or are albinos. The planet has one large continent and numerous island chains. There are moving tectonic plates, a molten core, and a small moon (one-third the size of Luna) which is home to several large mining colonies.

PROFILE

Cygnans as a species resemble Earth Human albinos with one major difference: where a Human albino's eyes are pinkish, a Cygnan's eyes are jet black, with no discernable whites or pupils. It cannot be confirmed or disproved that Cygnans descended from Earth-Human stock, but there are no fossil ancestors on the Cygnans' own planet. Wherever they came from, they were transplanted within the last 50,000 years. Cygnan DNA is similar to Human DNA, but not identical. Their internal organs (especially the eye) are structured differently in many cases, and they can only interbreed with Humans with difficulty. If they are related to Humans, the relation is more distant than that of the Alpha-Centaurans, Rigellians, or Deians. Cygnans live 90-100 years on average with modern nutrition and medicine.

Due to their lack of pigmentation, Cygnans protect themselves at all times when visiting other worlds by using a special long-lasting chemical sunscreen.

Cygnan

19 points

Advantages: Talent (Mathematical Ability) 1 [10]; Talent (Physical Science) 4 [20]; Versatile [5].
Disadvantages: Gregarious [-10]; Weakness (Sunlight; 1d/30 minutes; mitigator -60%) [-6].

Cygnan characters living prior to Y70 must buy the Disadvantage: Subjugated (Kzinti) which reduces the template cost by 20.

Most Cygnans will add Federation Standard as a known language in addition to their native language. Most Cygnans born prior to Y70 will add Kzinti as a known language in addition to their native language.

III. HISTORY OF CYGNUS

In ancient times, numerous tribes of primitive Cygnans fought wars to control the various fertile areas of the Seranaya Plains. As there was only a single continent to occupy, outward expansion was all but impossible, subjecting the species to severe population pressures. Loosely associated bands fought constantly to hold onto whatever land they had staked out. This hard cycle of warfare lasted well into the Cygnans' Bronze Age, when the Sky Fathers ostensibly came down and changed everything, approximately 3,000 years ago.

Cygnan legend has it that the Sky Fathers "drew lines in the earth with spears of fire" that divided the Seranaya Plains into separate, inviolate areas for each of the major tribes to occupy. Cygnan society gradually grew more peaceful, and the people eventually outgrew the need to remain within their boundaries to preserve the peace. It is not known if the Sky Fathers were the same species who originally transplanted the Cygnans to their world. It is known that the Fathers were not the Old Kings. They may have been the so-called Preservers. See the section *Mys-*

teries of the Federation for more details. The Sky Fathers eventually departed, leaving the Cygnans to mature into a peaceful and highly technological society.

The Cygnans developed primitive spaceflight ability and were on the verge of embarking on a major program of exploration when the Kzintis arrived in Y48. The Kzintis quickly declared Cygnus to be a "protected" planet and off-limits to outsiders. Although Cygnus was some distance from the Hegemony, the system was rich in resources, and the Kzintis could tell that the Cygnans were superb technicians. They provided the Cygnans with access to high technology, although only so that the Cygnans could build (and eventually improve) items for them. The first Federation exploration ships tried to reach Cygnus in Y87, but were kept away by the Kzinti fleet.

After the First Federation-Kzinti War ended in Y92, the Federation was still barred from contact with Cygnus and resorted to having the GIA conduct clandestine missions, most of which failed to return. Enough information was obtained, however, to show that possession of Cygnus was a major Kzinti advantage, and would be a major gain for the Federation should they gain control. The GIA began to provide funding for anti-Kzinti Cygnan-independence movements as a result.

Due to Cygnus's distance from the core of the Hegemony, it became more and more difficult for the Kzintis to maintain control over it, especially after the Federation Border Declaration of Y102 (the validity of which the Kzintis did not recognize). The Kzintis and Federation eventually agreed to the Cygnus Protocol in which the Kzintis accepted limits on their trade rights in order to avoid annoying the Federation (and possibly causing a war); the Federation believed they were doing the Kzintis a favor by recognizing their historic relationship with Cygnus and allowing them to continue doing business with Cygnus, although this trade was strictly limited to non-military goods. As far as the Kzintis were concerned, they owned Cygnus since the Kzintis didn't accept the Y102 Declaration; the Federation assumed they owned the system because of that declaration.

Not wishing to remain under the Kzinti sphere of influence, the Cygnans welcomed the Federation and conspired with Federation businesses (and the GIA) to evade the agreed upon limits in trade and technology as set by the Cygnus Protocol. The Cygnans had been virtual slaves of the Kzintis for decades and were more than tired of the one-sided relationship. Between Y102 and Y135, Kzinti influence over Cygnus steadily eroded, while Federation influence steadily increased. In Y131, the Cygnans went so far as to formally request Federation membership.

Cygnus was one of the flashpoints of the Second Federation-Kzinti War in Y136. The war ended in Y142 when the Kzintis lost the war and signed a peace treaty; part of the treaty included the Kzintis' acceptance of the Y102 declaration and agreement to give up all claims to Cygnus. The Federation's victory in this conflict and the establishment of a firmer border with the Hegemony brought Cygnus formally into the Federation in Y142.

IV. CULTURE OF CYGNUS

Government: Cygnan government is democratic in character and in line with Federation norms, although administration and local politics are still closely tied to the ancient city-states and provinces of the Seranaya Plains. For historical and political reasons, including religious factors and the bitter memory of the Kzinti Occupation, Cygnus is the Federation member most openly critical of the Prime Directive and the member most likely to support loose interpretation of this directive. This occasionally causes conflict with the Vulcans and Rigellians in the halls of the Federation Council, as those two species tend to support a stricter interpretation.

Society: Open and cosmopolitan. Education is highly valued by most Cygnans. There is absolute equality between the sexes, and as with Earth Humans, the nuclear family is the dominant (though not exclusive) form of social organization for Cygnans.

Economy: The Cygnan economy is robust and focused on industrial goods and high technology. A disproportionate share of the Federation's top scientists are Cygnan, and many of the systems and electronic components now in standard use throughout the Federation are a direct result of Cygnan research and technology. The Cygnans are extremely adept at all forms of technological endeavor, considering them forms of art.

Laws: In line with Federation norms, and administered at the local and provincial levels.

Religion: Few Cygnans give "what lies beyond this universe" much thought. For most Cygnans, religion is not focused on the concept of a god or gods or an afterlife. Most Cygnans follow "The Way of the Fathers," a set of moral and ethical teachings given by the Sky Fathers about 3,000 years ago. Many Cygnans believe they are actually descended from the Sky Fathers. Their beliefs are cen-

Continued on page 102.

Paktar (Deians)

SYSTEM SURVEY: Paktar

Star Class: G8V yellow dwarf (0.87 stellar mass).

Planets

I. Neriko Nerillar: Class-I hot rock, 7,871 miles in diameter, similar to Mercury but larger. This planet orbits very close to the star and is tidally locked.

II. Fallana Nerillar: A hot Class-K desert world (155°F mean temperature), but with a working biosphere, 7,321 miles in diameter. The planet is home to a huge, domed colony devoted to industrial mining, population 25 million.

III. Kal'Tyar Seterra Nerillar: This is the Deian homeworld, Class M. See the planetary survey.

IV. Voranana Nerillar: Class O, a glaciated world with water ice and a mean temperature of -20°F, 6,987 miles in diameter. This planet is also colonized with a domed, mining facility, population 30 million.

V. Korok Nerillar: Class-A ringed gas giant, similar to Jupiter, with 23 large moons, 14 of which host mining facilities.

VI. Tovak Nerillar: Class-A ringed gas giant, also similar to Jupiter, with 19 large moons and numerous mining facilities.

VII. Vanana Nerillar: Class-B cold gas giant with no significant moons.

VIII. Opana Nerillar: Class-B cold gas giant with one large moon, which hosts a scientific-research outpost.

IX. Quaman Nerillar: Class-B cold gas giant with no significant moons.

PLANETARY SURVEY: Paktar

I. GENERAL INFORMATION

Status: Homeworld of the Deians, minor industrial world.
Location: Coordinates 2505, Federation.
Mass: 6.335 x 10^{21} metric tons.
Density: 5.8.
Diameter: 8,223 miles.
Class: M.
Surface Area: 212 million square miles.
Land Area: 53 million square miles.
Land Area as Percentage of the Surface: 25%.
Surface Gravity: 1.08G.
Mean Surface Temperature: 80°F.
Surface Pressure at Sea Level: 1.13.
Atmosphere Composition: Nitrogen 75%.
Oxygen 22%.
Argon: 2%.
Trace Gasses: 1%.
Pollution: Very mild in industrial areas.
Orbital Distance: 74 million miles (0.80 AU).
Day: 24 hours.
Year: 281 local days (281 Earth days, 0.77 Earth years).
Axial Tilt: 16°.
Population: 8 billion.

II. BIOSPHERE

Typical Class M, with five continents, numerous islands, moving tectonic plates, two small moons, and a diverse, thriving biosphere. The Deians concentrate most of their industrial production on their two colony worlds and in orbital facilities, thus enabling the homeworld to maintain a nearly pristine environment. It is considered among the most beautiful Class-M planets in the Federation.

PROFILE

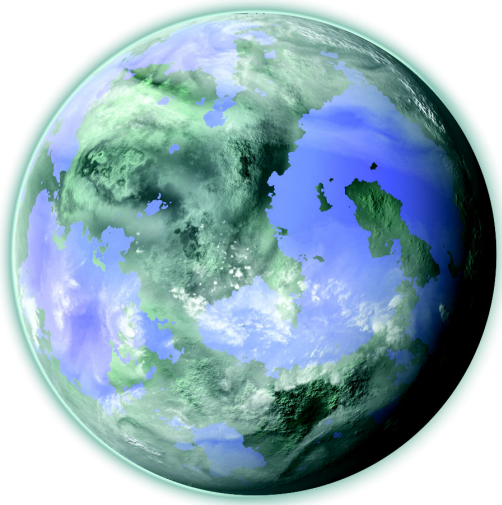
Deians are virtually identical to modern Earth Humans, sharing over 99% of their DNA and being able to reproduce with them without medical intervention. They closely resemble Humans physically, although their species does not share the variations in pigmentation found in Earth Humans. All Deians have the same pale-blue skin coloring and little or no facial hair. Their overwhelming beauty, both male and female, is also their most daunting disadvantage as they find it difficult to convince others, particularly Humans, to take them seriously. They have no such problems with species that do not appreciate humanoid beauty. Like Earth Humans, Deians live about 100 years with good nutrition and medical care.

Deian

37 points

Attribute Modifiers: IQ+1 [20].
Advantages: Appearance (Handsome/Beautiful) [12]; Charisma 1 [5].

Most Deians will add Federation Standard as a known language in addition to their native language.



III. HISTORY OF THE DEIANS

The Deians are descendants of Earth Humans transplanted to this world about 100,000 years ago by an unknown precursor species (the Seeders). Researchers note that the Alpha-Centaurans and Rigellians were seeded on their respective worlds at about the same time.

The Deians evolved along similar lines to other populations, adapting to their environment and developing some physical differences over the millennia compared to Earth Humans. Their society progressed through the Stone, Bronze, and Iron ages. There was conflict over resources, cultural differences, and religion. Empires rose and fell.

Society took a sharp turn toward peaceful resolution of conflicts following the rise of the Arillai religion about -Y550. There were still occasional small-scale conflicts, but major wars were avoided as Arillai took hold among the majority of the population. By Y50, the Deians had a world government, had achieved TL7 and nuclear power, and were reaching out into space with their first primitive spacecraft.

The Deians had established colonies on three planets within their home star system by Y150. Research was moving forward on theoretical faster-than-light drive systems, and the Deians were actively seeking contact with other species. An automated Star Fleet probe discovered the Deians in Y119, but Federation sociologists, working with limited information, were uncertain if the Deians were completely ready for First Contact and the planet remained under Prime Directive protection. A Vulcan survey ship dispatched in Y128 to conduct a close study failed to report back, for unknown reasons. The fate of this ship was never discovered; it may have fallen victim to a pirate or space monster. An extensive covert study planned by UESPA in Y136 was postponed due to the outbreak of the Second Federation-Kzinti War. Another automated probe dispatched in Y145 detected clear indications that the Deians were on the verge of developing warp drive. Finally, the Federation Galactic Survey Cruiser *Magellan* entered orbit around their planet on July 25th, Y150.

First Contact went well. Captain Toru Mizaki of the *Magellan* dwelt on the Deians' "godlike" beauty in his report to the Federation Council. More importantly, Mizaki's report concluded that "this species is an outstanding candidate for Federation membership. Their society is fully compatible culturally, politically, and philosophically with Federation ideals."

The Deians applied for Federation membership in Y152, were accepted as probationary members in Y154, prospective members in Y158, and became associate members in Y163. Deians began serving in Star Fleet in Y156, mostly (although not exclusively) in the scientific and medical departments.

IV. CULTURE OF THE DEIANS

Government: The Deian government is a parliamentary democracy rather similar to Earth's. The planet is divided into 74 regional cantonments for local elections and administrative purposes, corresponding roughly with ancient nation-state boundaries. There are further subdivisions at provincial and local levels. The Chancellor, elected by popular vote along with the Parliament once every six years, is the head of both state and government.

Society: Open, tolerant, and cosmopolitan. Deian society was rather matriarchic in the past, but men have had full social and political rights for hundreds of years. The Deians refer to themselves as True Nerillar. In public they use the species designations Human, Cygnan, etc., but in private they refer to other humanoid species in the order in which they were first encountered. Humans are Second Nerillar, Cygnans are Third Nerillar, and the list continues. Deians believe that all other humanoid species, even those they are not directly linked with DNA-wise (Vulcans, Tellarites, Brecon, etc.), are related to them in some way.

Economy: Free-market capitalist with social protections for the weak and powerless, typical for the Federation.

Laws: Also typical for the Federation, with a particular focus on civil rights. It took very few changes to bring the Deian legal code up to Federation standards. These were mostly cosmetic changes to avoid misunderstandings or misinterpretations by non-Deians.

Religion: At one time, religious conflict was a major problem for Deian society, with hundreds of religious groups vying for adherents, sometimes violently. This changed about the year -Y550, with the rise of the charismatic Prophet Arilan and her Arillai sect. For almost 20 years, Arilan traveled throughout the various nation-states, preaching her gospel of benevolent monotheism, love, peace, brotherhood, and harmony. Accounts differ on whether she performed overt miracles.

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Frallia

SYSTEM SURVEY: Frallia

Star Classes: This is a trinary system with three stars.
G4V yellow dwarf (0.95 stellar mass);
G7V yellow dwarf companion (0.93 stellar mass) at 75 AU;
K9V orange dwarf companion (0.67 stellar mass) at 159 AU.

The G4V yellow dwarf is the largest star in the star system. The star has a system of six planets.

Planets

I. Ketofornia: A Class-I world similar to Mercury, 4,301 miles in diameter. It is in a very close orbit, tidally locked, has no atmosphere, and has little in the way of exploitable resources.

II. Nakfornai: Class C. Similar to Venus, 7,332 miles in diameter, it has a blistering hot atmosphere. It has a large natural satellite, Dnann, 4,111 miles in diameter. This moon is rich in minerals and is home to a large domed, mining colony with 800,000 residents.

III. Frallia: An unusual Class-M/F planet; see the planetary survey. There is one natural satellite, Tecpha, similar to Luna but slightly smaller. Tecpha is home to numerous mining operations and has a population of about 1 million living in sealed domes and underground habitats.

IV. Kalinifornai: A monstrous Class-A gas giant, easily visible to the naked eye in the Frallian sky at night, considered a brown dwarf by some astronomers. This world has 37 large and medium-sized satellites and dozens of moonlets. Many of them are mined.

V. Venkefornai: A smaller Class-B gas giant, similar to Uranus or Neptune.

VI. Lakafornai: A frozen Class-P world, 6,699 miles in diameter, covered with glaciers of carbon dioxide and other gasses.

The G7V companion star has a system of six planets: one Class F, two Class G, one Class-A gas giant, and two Class-B gas giants.

The K9V companion has a system of four planets: two Class-A hot gas giants and two Class-B cold gas giants.

The combined trinary has the usual assortment of comets and small iceballs in extended orbits around the center of gravity between the three stars.

PLANETARY SURVEY: Frallia

I. GENERAL INFORMATION

Status: Homeworld of the Fralli.
Location: Coordinates 3201, Federation.
Mass: 4.743 x 10^{21} metric tons.
Density: 5.495.
Diameter: 7,602 miles.
Class: M/F (see below).
Surface Area: 182 million square miles.
Land Area: 44 million square miles.
Land Area as Percentage of Surface: 24%.
Surface Gravity: 0.952G.
Mean Surface Temperature: 63°F.
Surface Pressure at Sea Level: 0.97.
Atmosphere Composition: Nitrogen 75%.
Oxygen 21%.
Neon 3%.
Trace Gasses: 1%.
Pollution: Mild in industrial areas.
Orbital Distance: 89 million miles (0.957 AU).
Day: 25 hours.
Year: 337 local days (351 Earth days, 0.961 Earth years).
Axial Tilt: 18°.
Population: 5 billion.

II. BIOSPHERE

From orbit, Frallia looks like any other stereotypical Class-M planet; there are oceans, forests, and grasslands. There are two large continents and thousands of islands. The climate is temperate and fairly mild, and the planet is rich agriculturally and mineralogically.

Unlike the typical Class-M planet, however, humans can't breathe the Frallian atmosphere without wearing a respirator. Sulfur dioxide gas makes up less than 1% of Frallia's atmosphere, but the amount present is still fatal for humans, near humans, and most humanoids. Non-native species attempting to breathe Frallian air will suffer the effects of sulfur dioxide poisoning within five minutes.

For years, astronomers argued about how to classify Frallia. Obviously the planet was not typical Class M, since most humanoids could not walk around breathing unfiltered air, but it didn't fit the normal Class-F, "sulfurous atmosphere" classification either, being much cooler than most Class-F worlds, which tend to be blistering hot. Astronomers eventually settled on an M/F hybrid designation. Obviously, forms of life native to Frallia evolved in this environment and don't have a problem with the atmosphere's sulfur dioxide content.

PROFILE

The Fralli are pale, slender humanoids, with oddly shaped foreheads and nose bridges. While unremarkable in stature and physically weaker than most humanoids, the Fralli possess the distinctive and unusual ability to produce sizeable bioelectrical charges, called "sparks." This bioelectric charge is strong enough to knock a healthy adult Human unconscious for several minutes. Many forms of life on Frallia possess similar, if less pronounced, abilities.

Frallis are immune to other Frallis' sparks.

The sparking ability has shaped the nature of Fralli society. Originally used for hunting prey for food, a hunter was praised for his ability to bring home the biggest kill, either in size or quantity. Many Fralli, especially those who have their eyes on joining Star Fleet or going off world, study some sort of martial art so as to be able to use their sparking abilities more efficiently. Many Fralli also study the use of the Fralli pole whip, described in the *Weapons* section.

The Fralli also use their bioelectric capabilities to power appliances, creating a culture that is both frugal and conservation-minded. It is a source of pride if a Fralli can power the devices used in daily life, including computers, lighting, communication, and food processing. Even light conveyances can be powered by the user's own biocharge. This has the side effect of keeping the production of such devices on a local level as they must be specially designed for the biocharge.

An honored profession on Fralli is that of the "Spark Wand," a master at producing chromatic effects in a charged field by careful attenuation of the biocharge output. Fine control is needed to create the glowing hues and shifting pattern of electrostatic light; power is needed to fill an area several dozen yards in diameter. A true master Spark Wand has been described as "An aurora borealis with the planning and precision of a fireworks display."

There are actually two vastly different "schools" of Spark Wands. One school, sometimes referred to as "Freestyle," encourages the Spark Wand to create the art by manipulating his own biocharge output in what admirers call "a more natural artform." The other major school is commonly called "Finestyle" and the artist uses a wand (also called a spark wand) to create art that fans describe as "more precise and finished" than the typical "Freestyle" art. Spark Wands tend to go their own way, with some blending the two styles of art.

Fralli, Zorski Class III-B, are not related to Humans and evolved independently on their planet. They cannot interbreed with Humans without medical intervention. The average lifespan is 95 years with good nutrition and medical care, though rare individuals as old as 175 years have been recorded. They are mammals and reproduce in the typical humanoid fashion.

The Fralli can breathe normal Class-M atmospheres without problems, though Fralli living off-world need to take a weekly sulfur supplement to ensure proper health.

Fralli

-33 points

Attribute Modifiers: ST-3 [-30].
Advantages: Innate Attack (burning, 1d) (melee attack, reach C -30%, no incendiary effect -10%, side-effect Stunning +50%, Surge +20%, Variable +5%, costs 1 FP -5%) [7]; Resistant (Fralli spark) (Occasional, Immunity) [10].
Disadvantages: Dependency (Sulfur, weekly) [-15]; Unusual Biochemistry [-5].

Most Fralli will add Federation Standard as a known language in addition to their native language.

Racial Skill: Sparking
Will/Hard
Defaults: Will-6 or Artist (Spark Wand)-5.
Prerequisite: Fralli only.

After a successful physical attack has been made, this skill allows a Fralli to stun and burn prey or an opponent. The charge is conducted via a touch or by being transmitted by a Fralli pole whip or some other conductive material such as a metallic whip or a metal fence. A Fralli's HT limits the level of Sparking as the skill level may not be higher than the HT. The number of times that Sparking may be used is limited by Fatigue Points.

This skill also allows a Fralli to channel a charge into an electrical device that is physically held. Providing power uses fatigue points that vary by the size battery used. Emulating a power cell ranges from fairly easy to difficult. The following chart shows the fatigue points required and the modifiers to the skill.

Power cell size	Fatigue Points	Skill modifier
AA cell:	0.01	+6
A cell:	0.1	+3
B cell:	1	+0
C cell:	10	-3
D cell:	100	-6
E cell:	1000	-9

Powering a device that requires multiple power cells, such as two E cells, still has a -9 modifier, but consumes fatigue at twice the rate of a single power cell.

Special Limitation: A Fralli can only power devices that have been specifically built or adapted to accept a Fralli bioelectric charge. Existing devices can be altered so as to be compatible with this ability with a successful roll of the appropriate Armoury, Electronics, or Mechanics skill and some work. The amount of time needed, from a couple of minutes for a basic flashlight to several hours for a complex vehicle, depends on the size and complexity of the device, as decided by the GM.

III. HISTORY OF FRALLIA

Evolving from a precursor species of primates native to grassland areas of the northern continent, the first anatomically modern Fralli emerged about 40,000 years ago. As is common with most humanoid cultures, they eventually developed language, tools, hunter/gatherer societies, and primitive agriculture. The first city-states rose about 3,000 years ago, and technological progress was more rapid than on Earth.

The Fralli developed TL5 about -Y100, and advanced quickly from that point. By Y50, the Fralli had developed

Continued on page 102.

Mantor

SYSTEM SURVEY: Mantor

Star Classes: G1V (1.09 stellar mass);
Companion star B (G1V companion, 1.08 stellar mass) at 175 AU.

The planet Mantor lies in a binary star system. Both of the parent stars are G1V main sequence yellow dwarfs; the two stars are virtually twins, although star A has slightly more mass than star B. The two stars are separated by 175 AU, far enough away for each to have its own set of planets with stable orbits.

Planets of Star A

I. Kantor: Class-I hot rock, similar to Mercury, 4,805 miles in diameter.

II. Brantor: Class-C hothouse, 8,003 miles in diameter, typical Venus type.

III. Mantor: Mantorese homeworld; see the planetary survey. The planet has two moons, each about half the size of Luna. Both moons house small domed colonies.

IV. Phantor: A dry Class G world, cold with a mostly carbon dioxide atmosphere, similar to Mars but larger (7,800 miles in diameter). The planet has native bacterial life, but no larger forms. There are small-scale, temporary mining operations, but no permanent settlements.

A: There is a large asteroid belt between the orbits of Phantor and Zantor.

V. Zantor: A gargantuan Class-A gas giant. Many astronomers classify this body as a brown dwarf "failed star" rather than a true planet. There are 12 major moons (seven with mining stations), 37 smaller moonlets, and millions of asteroids and rocks in orbit around this world. Many of them are rich in minerals.

Planets of Star B

Other than a few research and mining stations, this system is unoccupied.

I. Dharma: Class-C hothouse planet, 6,333 miles in diameter. There is a gravity research station.

II. Harryhausen: Class-A gas giant, very similar in size and mass to Jupiter. There are 20 mineral-poor moons of various sizes, one housing a small Federation research station.

III. Asimov: A smaller Class-A gas giant, similar to Saturn though without rings. The planet has 14 moons, six with mining stations. Two of the larger moons, which are not mined, have subsurface liquid water oceans with indigenous single-celled life forms.

IV. Pohl: Class-B gas giant, an average Neptune/Uranus type. This world has a minor ring system and three large moons.

V. Serling: A small Class-B gas giant without rings and only one moon (named Nightmare) at 20,000 kms.

VI. Zebra: A tiny Class-J cold rock, with few exploitable resources, more properly a very large planetoid than a true planet.

PLANETARY SURVEY: Mantor

I. GENERAL INFORMATION

Status: Homeworld of the Mantorese.
Location: Coordinates 2206, Federation.
Mass:6.143 x 10^{21} metric tons.
Density: 5.4.
Diameter: 8,335 miles.
Class: M.
Surface Area: 218 million square miles.
Land Area: 52 million square miles.
Land Area as Percentage of Surface: 24%.
Surface Gravity: 1.03G.
Mean Surface Temperature: 60°F.
Surface Pressure at Sea Level: 1.01.
Atmosphere Composition: Nitrogen 73%.
Oxygen: 25%.
Argon: 1%.
Trace Gasses: 1%.
Pollution: Mild/Moderate.
Orbital Distance: 98 million miles (1.05 AU).
Day: 25 hours.
Year: 361 local days (376 Earth days, 1.03 Earth years).
Axial Tilt: 24°.
Population: 6 billion.

II. BIOSPHERE

Mantor is typical Class M, with three continents, moving tectonic plates, a molten core, and a standard magnetic field. The planet has two moons and complex tidal patterns. Mantor is known for its lush temperate forests, fertile soil, and diverse biosphere. There is also significant mineral wealth, especially in platinum and perzillium (a rare mineral used in stasis generation equipment) particularly in the mountain ranges of the central continent.

PROFILE

Mantorese resemble a cross between a Terran bear and an octopus. They are bipedal, generally ranging in height between five-and-a-half and six feet. Mantorese have bear-like legs, plus two tentacle-like appendages on either side of their body which correspond to human arms and about the same size. They are ambidextrous. They also have between six and nine smaller tentacles protruding from their head, just above their small, beak-like mouths. The number of smaller tentacles depends on the ethnicity of the individual. The two "arm" tentacles are used for large-scale manipulation of objects and most day-to-day tasks (opening doors, handling weapons, driving a ground car, working a starship helm), while the smaller tentacles are used for fine-detailed, sensitive work, such as surgery, mechanical repairs, and giving affection. Although Mantorese do not have humanoid-style hands, their tentacles are quite flexible, providing great manual dexterity.

Mantorese are covered with soft fur, the color varying between brown, gray, and black (depending on ethnic heritage). They are mammals, although it is almost impossible for non-Mantorese to tell just by looking whether a given individual is male or female. The gestation period in the

womb is 10 Terran months. They reach sexual and social maturity at age 15. With proper nutrition and medical care, the average lifespan is approximately 75 human years.

Mantorese are a very sensitive species with a strong connection to nature. They hold all animals in high regard, particularly those they consider "semi-sentient." This includes companion pets on their own world, as well as Terran dogs and cats, Rigellian ferrets, and many similar creatures. Animals, even those from other planets, usually react well to the presence of Mantorese; they make excellent veterinarians and animal trainers.

Most Mantorese, whatever their profession, have at least some training in animal handling, nature studies, ecology, and similar skills. Naturalist (Mantor) at IQ skill is extremely common among all social classes and professions. While some Mantorese are vegetarians, most are omnivorous. However, Mantorese society provides strong protection for feed animals, which are almost always killed humanely.

Despite their imposing appearance, the Mantorese are (for the most part) a peaceful species, although most individuals are not true pacifists and will fight (and kill) if necessary. However, most individuals have a low physiological tolerance for pain, and are often highly impressionable, although there are always exceptions.

Mantorese

51 points

Attributes: IQ+1 [20]; DX+1 [20].
Secondary Characteristic Modifiers: Will -1 [-5].
Advantages: Ambidexterity [5]; Enhanced Arms (Extra-flexible) [5]; High Manual Dexterity 2 [10]; Talent (Animal Friend) 1 [5].
Perk: Fur [1].
Disadvantages: Low Pain Threshold [-10].

Many Mantorese will add Federation Standard and/or Kzinti known languages in addition to their native language.

III. HISTORY OF MANTOR

The Mantorese evolved from a precursor species of omnivore on their homeworld, the first biologically "modern" Mantorese emerging about 8 million years ago. There is evidence that organized agriculture-based societies first emerged about 70,000 years ago. These societies apparently collapsed within 10,000 years due to radical climate change brought on by a sudden shift in solar energy output from the parent star. The Mantorese tried again with agriculture about 20,000 years ago, getting on the path followed by many sentient cultures. Their society progressed through the Bronze and Iron ages, achieving early industrialization and TL4 technology about -Y700. There were major cultural differences between the various ethnic groups, resulting in conflict and occasional wars.

The Mantorese achieved TL9 technology at least two centuries before humans did, but they did not explore much beyond their immediate space. Due to social and political stagnation, the Mantorese failed to develop beyond this level of technology on their own, eventually becoming dependent on Kzinti, Federation, and Klingon imports.

IV. CULTURE OF MANTOR

Government: Democratic and decentralized, ranging from city councils at the lowest levels to the Planetary Parliament that directs the central government. This central government (in charge of foreign relations and economic policy) is paralyzed more often than not, due to the concept of "Thhhrrllakkikikool," which translates as "The Importance of Agreement Among The Whole." Given the widespread ethnic and cultural differences among the Mantorese, such agreement is difficult to come by. Laws must pass by four-fifths vote of the Planetary Parliament, which makes it nearly impossible for anything to get done at all. At the lower political levels, bribery and corruption have been serious problems at times. Reform can only take place in accordance with "Thhhrrllakkikikool," as the concept of revolution outside the established political process is unthinkable for most Mantorese. The unpleasant experience of Kzinti occupation from Y136-Y140 seemed to shake Mantorese society from its stupor, enabling reform to finally follow, reducing corruption and improving the economy. Mantor applied for Federation membership in Y160 and was accepted as a probationary member in Y164. Mantor obtained prospective status in Y170, but did not achieve associate status until after the General War.

Society: Cosmopolitan. There are important regional differences in terms of language, religion, and ethnicity; however, these divisions are less important now than before Mantor joined the Federation. Ethnic tension was a major problem for most of Mantorese history, but has eased in the last 50 years. In family relations, Mantorese marry for life at age 16 or 17, although most marriages are "open"

Continued on page 103.

Mynienix

SYSTEM SURVEY: Mynienix

Star Class: F7V (1.45 stellar masses).

Planets

I. Patrienix: Class-C hothouse, 8,191 miles in diameter, similar to Venus.

II. Dulconix: Class-C hothouse, another Venusian world, 6,318 miles in diameter.

III. Rotavenix: Class-G desert world, similar to Mars but warmer due to proximity to the star, 4,508 miles in diameter. About 50,000 miners and colonists, almost all from outside the system, live in domed colonies.

IV. Mynie: Mynieni homeworld; see planetary survey.

A: There is an asteroid belt in the considerable gap between Mynie and Boronienix.

V. Boronienix: Class-A hot gas giant, Jupiter type with large rings and 14 large moons.

VI. Mandonienix: Class-B cold gas giant, similar to Neptune, with seven moons.

VII. Fanienix: Another Class-B cold gas giant with 12 moons, one of which is a captured comet.

VIII. Kevonienix: Class-J cold rock, 7,109 miles in diameter. This was the first planet that had to wait for the development of telescopes to be detected.

IX. Warrenix: Class Q iceball, 1,350 miles in diameter.

X. Rinnahix: Class Q iceball, 1,076 miles in diamater.

There is an extensive Oort Cloud with at least a half dozen iceballs under 650 miles in diameter.

PLANETARY SURVEY: Mynie

I. GENERAL INFORMATION

Status: Homeworld of the Mynieni.
Location: Coordinates 3204, Federation.
Mass: 4.129 x 10^{21} metric tons.
Density: 5.0.
Diameter: 7,491 miles.
Class: M.
Surface Area: 176 million square miles.
Land Area: 69 million square miles.
Land Area as Percentage of the Surface: 39%.
Surface Gravity: 0.85G.
Mean Surface Temperature: 60°F.
Surface Pressure at Sea Level: 1.20.
Atmosphere Composition: Nitrogen: 80%.
Oxygen: 19%.
Trace Gasses: 1%.
Pollution: None.
Orbital Distance: 130 million miles (1.40 AU).
Day: 120 hours.
Year: 101 local days (504 Earth days, 1.38 Earth years).
Axial Tilt: 5°.
Population: At least 10 billion, exact number is unknown.

II. BIOSPHERE

Mynie is a Class-M planet, although with unusual features: it rotates very slowly for a planet of this type, with 60-hour days and 60-hour nights. The parent star produces strong electromagnetic radiation, causing severe static discharges in the thick atmosphere. This makes aboveground travel in the daylight hours a difficult and dangerous proposition. As a result, the Mynieni and most other native species have evolved as creatures of the moonless night, leading a nocturnal existence.

PROFILE

The Mynieni are a non-humanoid species resembling upside-down pears supported by strong, ropy tendrils, sprouting from the bottom of their bodies. The body, which is often but not always a purplish-grey color, is about three feet from top to bottom and about eight feet in circumference at its widest point. The "legs" add an additional foot in height. Two very pale, dinner-plate-sized eyes complete the picture. As nocturnal creatures, they have evolved eyes almost 10 inches in diameter, with a retractable sheath to control the size of their cornea. As a result, their sensitivity to light is almost 20 times that of a human. Starlight is more than enough for a Mynieni to operate under normal rules.

Their hundreds of cilial limbs allow them to perform extremely subtle and precise manipulations. These multiple limbs give them a superior ability to traverse difficult terrain and maintain their balance.

Mynieni are mammals but are otherwise radically different physiologically from most Federation species. A single healthy female can produce anywhere between 30 and 200 young in a single breeding season, with several different mates, although no more than 5% of these young will survive more than a few weeks. A healthy Mynieni will live between 80 and 120 Earth years with good nutrition and medical care.

Mynieni

67 points

Attribute Modifiers: ST-3 [-30]; DX+1 [20]; IQ+1 [20].
Secondary Characteristic Modifiers: SM-1.
Advantages: Extra Arms 10 (Short, No physical attack) [20]; Extra Legs 10 (Cannot kick) [8]; Flexibility [5]; High Manual Dexterity 4 [20]; Night Vision 9 [9]; Peripheral Vision [15].
Disadvantages: Invertebrate [-20].
Feature: Normal light level for Mynieni is very low; Per-8 for humans. Mynieni eyes take a second to adjust to sudden light changes.

Most Mynieni will add Federation Standard as a known language in addition to their native language.

III. HISTORY OF MYNIE

The history of the Mynieni is obscure, as they are not very forthcoming about their past. Federation archeological expeditions have revealed little. There is some evidence that the Mynieni evolved from aquatic ancestors, as there

are several non-intelligent marine life forms on Mynie that resemble the land-dwelling sentients and have much DNA in common. There is no doubt that the Mynieni are a very old species, possibly achieving sentience as long ago as 4 million years, although their status has a technological culture is more recent, perhaps no longer than 50,000 years. The entire aim of Mynieni civilization is to ensure the safety of the species by expanding numbers. Technological progress seems to be almost accidental, although there is no doubt that they have been technologically advanced for many centuries.

First Contact with the Mynieni occurred in Y149, when the Federation starship *Constellation* entered their system while investigating unusual radio signals. By this point the Mynieni had achieved advanced sublight propulsion and were on the verge of developing warp travel.

The Mynieni quickly petitioned for Federation membership. This was somewhat controversial in the halls of the Council. While peaceful, the Mynieni did not share many of the concepts of "human" or sentient rights as the Federation generally understands them, particularly in relation to economics and politics. However, shortly after the brief Second Federation-Romulan War of Y154, the Mynieni petition for probationary status was accepted, and the species quickly advanced to prospective status in Y157 and associate status in Y161. Skeptics claimed this was solely because the Federation was desperate for new members (and new resources) in the face of interstellar tensions. The strategic position of Mynie in relation to the territory of the newly contacted Gorns gave credence to this theory.

After being welcomed into the Federation, the Mynieni showed very little interest in the outside galaxy. Some wondered why they had even joined. This changed abruptly just before the General War, when the Mynieni recalled their entire diplomatic delegation, replaced them with new members, then began taking a very active interest in military and diplomatic affairs. When asked about this, the Mynieni would only say that "The Burnishers are known to be returning. We must all be ready to meet them, and on their terms." Who the "Burnishers" are is a mystery. They may, or may not, be the Andromedans; the Mynieni won't elaborate either way.

Mynieni began joining Star Fleet beginning in Y170, usually serving in engineering and scientific positions.

IV. CULTURE OF MYNIE

Government: The Mynieni do not have a government per se, but it is clear that some Mynieni naturally assume positions of authority within the various social groups, with virtually no incidence of objection or resentment.

Individuals with "political" authority tend to be older (at least 50 years of age) and can be of either sex.

Society: The Mynieni are not particularly forthcoming about their society, and have provided Federation researchers with only the vaguest information. It is evident that there is some sort of innate caste or ranking system, often linked to age and seniority within the social group. There is al-

most no internal conflict, and the species has little trouble coming to consensus about political or social matters. Mynieni who are off planet have surprisingly little trouble integrating into the broader Federation society and generally have friendly relations with their non-Mynieni fellows.

Economy: Communistic and communal, but with a high rate of growth. Mynieni-produced precision electronics are among the best in the Federation, rivaling Cygnan technology for accuracy and processing speed.

Laws: Crime is virtually unheard of among the Mynieni, so there is no need for heavy-handed laws. A very few individuals recognized as asocial and "defective" from birth are, apparently, "culled" from society before they reach adulthood and can cause harm. (The Mynieni say that these are cared for in remote colonies, but refuse to provide any proof of this, and some suspect that these individuals are executed, which technically violates Federation law.) There is no recorded instance of a Mynieni committing a felony under the Federation legal code.

Religion: The exact details of their religious belief cannot be translated into non-Mynieni language, at least according to the Mynieni. The few non-Mynieni researchers who understand Mynieni language and have studied the topic say that Mynieni beliefs revolve around the "Great Being," a pantheistic conception of the Universe itself as God, but that the theology is highly complex and impossible to relate in non-Mynieni terms.

Prelaria

SYSTEM SURVEY: Prelaria's Star

Star Class: F9V yellow-white dwarf (1.15 stellar masses).

Planets

I. Holaria: Class-C hothouse, 7,981 miles in diameter, similar to Venus.

II. Sufarlia: Class-F world, sulfurous atmosphere, 5,389 miles in diameter.

III. Aridia: Class K, 7,587 miles in diameter, a desert world which was Class M at one time but was hit by a large comet about 30,000 years ago, destroying the climate and killing most of the native species. There is a small research colony.

IV. Prelaria: Homeworld of the Prellarians. See the planetary survey.

V. Gantaria: A gigantic Class-A gas giant, considered a borderline brown dwarf by some astronomers. One moon is 7,781 miles in diameter and has a Class-M, habitable environment. This moon is home to a large agricultural colony with over a million inhabitants. There are dozens of other moons, some with mining colonies.

VI. Bulavia: Class-B cold gas giant with six moons.

PLANETARY SURVEY: Prelaria

I. GENERAL INFORMATION

Status: Homeworld of the Prellarians, minor industrial world.
Location: Coordinates 2705, Federation.
Mass: 3.825 x 10^{22} metric tons.
Density: 5.8.
Diameter: 14,973 miles.
Class: E/M.
Surface Area: 704 million square miles.
Land Area: 190 million square miles.
Land Area as Percentage of the Surface: 27%.
Surface Gravity: 1.98G.
Mean Surface Temperature: 82°F.
Surface Pressure at Sea Level: 1.30.
Atmosphere Composition: Nitrogen 77%.
Oxygen 21%.
Argon: 1%.
Trace Gasses: 1%.
Pollution: Mild in industrial areas.
Orbital Distance: 105 million miles (1.13 AU).
Day: 31 hours.
Year: 316.6 local days (409 Earth days, 1.12 Earth years).
Axial Tilt: 14°.
Population: 11 billion.

II. BIOSPHERE

Prelaria is a Class-E super-terrestrial world much larger than Earth, but featuring a Class-M biosphere. The surface gravity is nearly twice that comfortable for Earth Humans and most other humanoids. The native species evolved here and are adapted to the environment, of course. There are three large moons and four smaller moonlets. All of these moons are mined for minerals.

PROFILE

The Prellarians are a squat, strong humanoid species, at home in tunnels and high gravity. Their powerful frames and technological inclinations are a result of their preference for high-gravity habitats. Rarely growing to a height greater than four feet, the Prellarians are highly respected for their technological and engineering skills, but also for their ability to crawl through tight conduits and cramped access ports.

Prellarians are humanoid and are considered "near-human" by medical researchers due to similar biochemistry, but they evolved independently on their world and cannot breed with Earth Humans without medical intervention. They have a typically mammalian life pattern and lifespan, about 90-100 years with good medical care.

Prellarian

35 points

Attribute Modifiers: ST+1 [10].
Secondary Characteristic Modifiers: SM-1.
Advantages: Improved G-Tolerance (±1.0 G) [15]; Intuition [15]; Pressure Support [5].

Most Prellarians will add Federation Standard as a known language in addition to their native language.

III. HISTORY OF PRELARIA

The Prellarians evolved from a precursor species of primate; the first anatomically modern Prellarians emerging about 150,000 years ago. As with most humanoid species, they went through hunter/gatherer phases, the Agricultural Revolution, and eventually the Bronze and Iron ages. Prellarian society was relatively peaceful after the

development of agriculture. Resources were plentiful. There were occasional skirmishes between city-states over religious or cultural differences, but for the most part Prellarian social development was sedate compared to the chaos of human history or that of many other species. The Prellarians had a politically unified society as early as -Y500, the various city-states and provinces recognizing the Monarch as the ultimate political authority, who in turn recognized their prerogatives in local matters.

The Prellarians were in the beginning stages of TL4 when the Old Kings contacted them in -Y350. The Old Kings did not take the Prellarians into space, and did not use them as a "Subject Race" as they did the Klingons or Hilidarians. But they did trade with the Prellarians, giving them some higher-technology goods and knowledge about the galaxy in exchange for minerals mined from the planet's surface. The Old Kings were apparently very interested in Prelaria's large deposits of sigma-positronium, a rare mineral with unique attraction/repulsion qualities and a necessity for null-gravity and high-gravity-generation technology.

The last Old King trading vessel left in -Y57 and the Old Kings were not seen again. The Prellarians were working on their first primitive FTL spacecraft when an Andorian exploration ship contacted them in Y65. The Prellarians signed a Treaty of Friendship and Trade with the Federation in Y68, were accepted as probationary members in Y85, prospective members in Y93, then associate members in Y101. Prelaria is respected enough by other Federation worlds to earn Full Member status, but the Prellarian government (for its own reasons) has not pressed for this.

IV. CULTURE OF PRELARIA

Government: The Prellarian government is a constitutional monarchy. The Monarch of Prelaria, a hereditary post, is the head of state but has little practical power in modern times. The two-chambered, democratically elected Constituent Assembly has been the center of political power

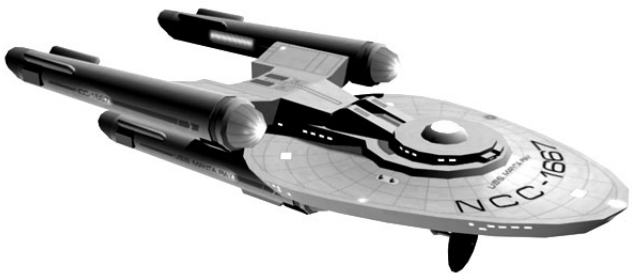
for hundreds of years. The king appoints a First Minister from the ranks of the Assembly after each election, and this minister is the true leader of government policy. Sentient rights are fully respected by the government, and it required only minor adjustment to bring the system in line with Federation norms.

Society: Like most Federation species, Prellarian society is open and diverse with an active civil sector.

Economy: Free-market capitalist, with an emphasis on mining and heavy engineering. Prellarians are probably the best miners in the Federation, due to their technical expertise as well as their attitude toward the craft.

Laws: In line with Federation standards.

Religion: Theologically speaking, the Prellarians are probably the least religious and most philosophically materialist of the main Federation species. Over 80% of modern Prellarians are actively atheistic or at least agnostic, in the sense of not believing in a reality aside from the material universe. On the other hand, many Prellarians have imparted an almost religious significance to many of the minerals and gems that others think of as merely valuable. They have a deep reverence for sigma-positronium, for example. The remaining 20% subscribe to a variety of beliefs, ranging from ancient Prellarian variants of monotheism and pantheism to religions imported from other worlds.



Tellar

SYSTEM SURVEY: Hahrnohk

Star Class: K5II, metal rich, sub-giant (3.5 stellar mass).

Tellarite Prime is the seventh planet in the Hahrnohk system. The star is more massive than those home to most species and much more luminous (sub-giant size), pushing the biozone able to support Class-M planets into the outer areas of the system. Tellarite Prime is very unusual in that it is a rocky terrestrial planet between two gas giants; it is thought to have been coalesced from material of the adjoining asteroid belt and moved further inward by some as yet unknown mechanism of solar system formation, perhaps an encounter with a large rogue planet passing through the system in the distant past. The high mineral content of Tellarite Prime supports this hypothesis.

Planets of Hahrnohk

I. Inahrohk: The inner planet is a small Class-I tide-locked Luna-sized body that is virtually useless due to its proximity to the Hahrnohk star. Ships can only stay for short periods, and bases cannot be maintained on the daylight side. Mining would theoretically be possible on the night side, but moving materials out is problematic and there are many resources easier to reach elsewhere in the system. There is a small unmanned scientific outpost on the night side.

II. Lahrohk: The second planet is also a Class-I body, similar to the first but not tidally locked and with less inhospitable surface conditions. There are two small manned scientific stations. Mining would be possible but there are easier places in the system to get the same materials.

III. Trilhrohk: The third planet is a Class-D (borderline Class-I) airless rock, 6,637 miles in diameter. It is far enough from the star to begin (barely) to make mining practical (there are a half-dozen mining colonies), although there are better locations for this in the Tellarite system.

IV. Qadhrohk: The fourth planet is Earth-sized, 7,838 miles in diameter, but is a Class-D rock with little-to-no atmosphere. The surface shows signs of atmospheric presence in the past but under extreme temperatures. Theories include a runaway greenhouse effect followed by atmospheric burn off due to the luminosity of the system primary. Mining is widespread across the surface and orbital facilities to support this are present.

V. Philhrohk: A small Class-A hot gas giant with eight moons and sparse rings. Five of the moons are fairly typical, but the sixth is unusually rich in rare minerals and other deposits. Mining stations are present as are a handful of scientific stations and outposts.

VI. Hezahrohk: A small Class-A hot gas giant. It has six moons and an extensive ring system. Mining stations are present, as well as a large space habitat which is home to 10 million citizens.

VII. Tellarite Prime: Tellarite homeworld. While no military shipyards or starbases are present, there are a large number of civilian orbital facilities to handle the shipping of mining products. The usual starship docking, resupply, and refueling facilities are present (in the form of a base station) as found on any major Federation member world. This was upgraded to a battle station during the General War. Extensive planetary defenses, including ground-based weapons batteries, fighter and bomber bases, and the nearby presence of the Federation Fifth Fleet, protect against pirates.

A: There is an asteroid belt near Tellarite Prime, which is extensively mined. The presence of these asteroids encouraged the Tellarites to go into space.

VIII. Okahrohk: The final planet is an enormous Class-A gas giant. It sweeps up asteroids, comets, and other debris in the outer system, protecting the inner planets. It has innumerable moons in orbit and large amounts of rocks and other debris that the Tellarites use for mining. There are also a number of scientific outposts, as well as a large orbital factory that produces shuttles and bombers.

K: There is an extensive Kuiper Belt beyond Okarohk which includes numerous small planets, thousands of comets, and numberless asteroids. Many of these are mined and one of the Kuiper Belt planets (Falarohk) is a regional shipping center for Federation Express.

PLANETARY SURVEY: Tellarite Prime

I. GENERAL INFORMATION

Status: Homeworld of the Tellarites, minor industrial world.
Location: Coordinates 3706, Federation, near the Federation-Gorn border.
Mass: 7.091 x 10^{21} metric tons.
Density: 6.7.
Diameter: 8,137 miles.
Class: M, note high density and heavy mineral content.
Surface Area: 208 million square miles.
Land Area: 8 million square miles.
Land Area as Percentage of the Surface: 47%.
Surface Gravity: 1.24G.
Mean Surface Temperature: 67°F.
Surface Pressure at Sea Level: 1.23.
Atmosphere Composition: Nitrogen: 78%.
Oxygen: 20%.
Argon: 1%.
Trace Gasses: 1%.
Pollution: Moderate in some areas.
Orbital Distance: 1,304 million miles (15 AU).
Day: 23 hours.
Year: 11,807 local days (11,315 Earth days, 31 Earth years).
Axial Tilt: 2°.
Population: 5.7 billion.

II. BIOSPHERE

Tellarite Prime has a smaller water-to-land ratio than many Class-M worlds. This has led to a larger portion of the planet's mineral resources being available for access to the inhabitants without having to deal with more difficult underwater drilling and mining technologies. Most life forms (and the Tellarites themselves) have a larger proportion of their body mass consisting of minerals (calcium, iron, etc.)

than other species, thus a Tellarite tends to be about 50% heavier than a Human of similar height would be. This mineral concentration gave rise to the "Tellis" root of their Federation name "Tellarite."

With a long year and minimal axial tilt, there is little seasonal change, and most weather patterns are stable in the long term. Climate variation from the equator to the poles is less extreme than on most other Class-M worlds, making a large portion of the land area easily habitable. There is a standard magnetic field and moving tectonic plates, typical for Class-M worlds. There are two small moons, collectively about half the size and mass of Luna.

PROFILE

The Tellarites are stocky humanoids with an average height of approximately five feet. They are covered with a small but tough layer of wool-like matting over most of their body, and their hands feature four stubby fingers; their heads and faces are often compared to that of a Terran pig. Although transplanted here from another world by some unknown ancient species, they are not directly related to humans and cannot breed with humans without medical assistance.

A hardy species owing to the great abundance of calcium and other minerals in their bodies, Tellarites are more massive than their Human counterparts with stronger bone and cartilage structures. This gives them greater resistance to bodily damage.

Tellarite

27 points

Attribute Modifiers: ST+1 [10]; HT+2 [20].
Secondary Characteristic Modifiers: HP+3 [6].
Advantages: Fearlessness 2 [4]; Damage Resistance 1 (Tough Skin, -40%) [3]; Resistant to Disease 8 [5].
Perk: Fur [1].
Disadvantages: Bully (12) [-12]; Odious Racial Habit (Argumentative [-5]; Selfish (12) [-5].
Quirks: Edgy [-1]; Nosy [-1].
Features: Extra-dense body structure: add 100 pounds to weight, cannot float.

Most Tellarites will add Federation Standard as a known language in addition to their native language.

III. HISTORY OF TELLARITE PRIME

There is no archaeological evidence that the Tellarites (or "Those of Hahrnohk" as they call themselves) actually evolved on their homeworld of Sahrnohk (their name for Tellarite Prime), but there is also no indication of where they originated. Their recorded history only goes back a few thousand years before interstellar contact. The fossil record shows no evidence of Tellarites beyond 15,000 years back. Many Federation historians and archaeologists have devoted their careers to this mystery, but the Tellarites themselves show little interest in its resolution and virtually no progress has been made in this area.

Although highly argumentative even amongst themselves, Tellarite history was relatively peaceful, especially

in the last 500 years before Y0. The Tellarites had formed a world government and moved into interstellar space around Y5 with their first primitive warp starships. Their own star system was resource rich, and so their initial explorations were primarily for colony sites for population expansion instead of additional resources.

Even at this early stage they had a natural knack for engineering which allowed them to construct colony facilities that were quite impressive given the level of technology. With their access to rich resources in their home star system, they were able to (relatively) easily fund several early interstellar expeditions to start nearby colonies. They had a surprising number of these by Y35, and the species now called themselves "Those of the Stars."

The Tellarites were contacted by a long-range Vulcan exploration ship in Y38, and while this did allow some basic information exchange, it did not lead to sustained relations as the two species did not interact easily, and the distance in that age was still too great for trade to be easily accomplished. After this meeting and news of many interstellar species in the Federation, the Tellarites again took up their original designation, "Those of Hahrnohk."

The Federation did not officially follow up on the Vulcan reports of this starfaring culture until Y42, when the United Earth Space Probe Agency dispatched the Earth starship *Dag Hammerskjold* for a diplomatic visit during the dark days of the First Romulan War. Despite the Vulcan reports of Tellarite combativeness, Earth hoped to recruit the Tellarites as Federation members, or at least allies.

This caused a crisis in the Federation Council chambers, as the UESPA mission had been dispatched without notifying the Council. Council Chairman Karl Schmidt (who had given hidden support to the Earth initiative) was forced to resign his office as a result. While the Tellarites refused outright membership (or at least insisted in much debate before joining), they were willing to sell their engineering

expertise in exchange for information of other stellar systems, potential colony sites, and resource locations that their ships had not yet reached.

The Federation had an abundance of this sort of information from its different member species (largely old Vulcan star charts), and many Tellarite work crews were brought on their own ships or on Federation vessels into the war zone to lend their construction expertise to build planetary defenses and to repair infrastructure destroyed by Romulan attacks. The eyewitness reports of such destruction sent back home to Tellarite Prime fueled great debate on whether the Tellarites should join the Federation or stay independent. This debate raged for years, during which time the Orions joined the Federation in Y45. The First Romulan War ended a year later.

During the years after the First Romulan War, trade and other contact between the Federation members and the Tellarites increased. Many of the greatest and richest Tellarite construction and engineering firms of later periods had their origins in the aftermath of the First Romulan War. Such contact was augmented by the invention of tactical-warp technology by Earth in Y62, which facilitated travel in the decades to follow.

The Tellarites finally reached a consensus and applied for normal Federation membership (not the special status Orion negotiated) in Y65. They were accepted in Y69, and over the next couple of years much of the Tellarite Star Navy was upgraded to tactical warp engines and photon armament for integration with Federation forces.

When the Federation finalized the form of the United Star Fleet and the various member fleets were relegated to planetary defense roles in Y116 (including the Tellarite Star Navy), many Orion ships and crews mutinied and turned pirate. Some Tellarite construction firms have long been suspected as having helped build the first networks of secret Orion colonies and bases. Federation lawyers have tried to connect various Tellarite firms with the Orion cartels, but the limited ability to officially investigate alleged activities on the other side of the Romulan Neutral Zone is a major barrier to this process. The Tellarite government is of little help in investigations as they see such accusations as slanderous attacks on their people. They simply point out all the legitimate work that has been done by Tellarites for Federation security.

The Tellarites eventually obtained associate member status due to their past help during the Romulan War and continuing contributions to the growth of the Federation, but have been unable to become accepted as full members due to the temperament of the species and the opposition of the Andorians and Vulcans in the council.

Nevertheless, the Federation would be the poorer without the Tellarites as members. Tellarites in Star Fleet contribute in any number of areas, often (but not exclusively) in engineering roles. A minor shipyard built by Star Fleet at its Fifth Fleet starbase late in the General War attracted many workers from Tellarite Prime to lend their expertise to this cutting-edge military technology. The Tellarites made similar contributions during the ISC conflicts and the Andromedan Invasion. They were particularly active in the reconstruction periods after the General War and the Andromedan War.

IV. CULTURE

Government: The government at all levels is a democracy where mudslinging and personal attacks during political campaigns (in addition to discussion of the issues and facts) is considered the norm and will often be worse than the dirtiest Human election campaigns. At least it seems that way to the Humans; the Tellarites can't understand why the Human politicians are always holding back. The Tellarites do not have political parties so much as they have a large number of "independent" candidates. There are often several viable candidates for any given position, and each one has no problems stating exactly what he thinks of his opponents. The voting public expects this as part of the process to help them choose the candidate to vote for. Who better to dig up the dirt on a given candidate's past then his opponents and thus reveal who is best for the job? So say the Tellarites.

Debates between candidates are eagerly sought by all sides, and there is little campaigning outside of the official debates. They are broadcast throughout the region voting on the issue (across the planet for elections of important government posts) and eagerly watched and endlessly analyzed by the public during the campaigns. It is common for the official debates to spawn more debates among the population (between coworkers, families, and neighbors) about who won the debate.

The Tellarite National Guard is relatively small but has many well-trained and equipped engineer units.

Society: Tellarites are often thought of as "bullies" by humans and other members of the Federation, as they constantly use arguments and intimidation to make their points, promote their agendas, and find their place in society. This is not perceived the same way by the Tellarites themselves, of course. "Bullying" is used in nearly all situations to determine status and position in the social hierarchy. It is used to determine who is the most forceful, the most determined to lead, or who has the greatest interest and knowledge in a given situation. It determines the natural pecking order in each subset of Tellarite society, whether in the workplace, at home, within personal relationships, or in the interaction between strangers in public. Within the family, children show little of what other species would think of as respect for the elders and parents. Offspring leave home at the age of 15 to enter into apprenticeship of someone they do respect within their chosen trade. Individuals with weak wills, or who are naturally shy, quickly find themselves at the bottom of Tellarite society.

The process works very smoothly among Tellarites in Tellarite society, and mainly generates problems only when Tellarites (who are loathe to change their ways) naturally use it in dealing with other species who then end up taking it personally. Other species (especially Andorians and Vulcans) cannot fathom how this process works so well for the Tellarites, but work it does.

Economy: On Tellarite Prime the economy is based more on bartering than nearly any other high-technology Federation world. In keeping with the finest Tellarite traditions, consumers are rarely satisfied with paying the advertised price for anything; haggling, bartering, and outright arguing over this price is expected as a matter of course.

On Earth, a Tellarite would be much more comfortable purchasing a used shuttlecraft and debating the salesman endlessly about the details of the dealer markup, two-year warranty, and service contract than shopping in a major superstore where a person gets in, grabs his merchandise, and gets out in 15 minutes. (From the other side, most used-shuttle salesmen will step on each other to grab the attention of the new customer who just walked in the door, but if that customer is a Tellarite, it is more likely they'll step on each other to avoid being the one stuck with him.)

In economic relations with the rest of the Federation, Tellarites make for tough negotiators over the best trade deals and prices. Many trade deals with other worlds will involve resources the planet needs in exchange for Tellarite manufacturing deals or skills. Tellarite diplomats were sent by the Federation to negotiate with the Kzintis. Tellarite Prime has produced more than its share of excellent machinists, electricians, engineers, and manufacturers. Many of the best Federation engineering/manufacturing firms are based on Tellarite Prime to take advantage of this knowledge and skill storehouse.

Not all of these are Tellarite-owned since companies of other species will often base part of their operation on Tellarite Prime in order to hire local Tellarite engineers and manufacturers for on-site design/assembly or as trainers for their own people. There is even one Andorian engineering cooperative that has offices and plants on Tellarite Prime, despite the friction that is often common between the two species.

Laws: In Tellarite society, debating and dueling are the accepted ways of settling disputes that cannot be resolved by mutual agreement of the involved parties. Instead of the courts, lawyers, judges, juries, etc., found on most other Federation worlds, Tellarites have a branch of their government that regulates and organizes official debates and (prior to Federation membership) duels. Only the most domineering of Tellarites work for the government's conflict resolution office. In most situations (arguments between neighbors, debates over shop prices, etc.), the parties involved simply come to some agreement, or one side backs down. In cases where this does not happen, the parties can appeal to the government for resolution.

Depending on the situation this could be a sanctioned duel (whether to the death or to some other declared condition), debate before a government official who will listen and decide upon resolution (analogous to trial by judge), or debate before a panel consisting of either the people affected by the outcome or a group of experts to the situation (analogous to trial by jury). The government assigns the "judges" and panels in such cases. Many off-world lawyers (including Vulcan judges) make a living on Tellarite Prime as private arbitrators where both sides concede that logic should decide a case, not arguing ability.

All political debates and elections fall under the jurisdiction of this system as well. It is the "trial by jury" variety of debate, where the debaters are the candidates, and the deciding panel is replaced by the voting population.

Religion: Spirituality and religion plays only a small role in Tellarite society. Tellarites who believe in a deity or creator usually take a "deist" approach and believe that such a being started the universe, but no longer takes an active role. With such a belief, there is little need for religion, and little practical application. Why pray for something when the creator will not interfere in the unfolding of the universe in any case?

There are several philosophical sects that debate things like the meaning of life, the problems in interactions and relationships, the question of suffering, and so forth. Several of these sects are devoted to the exploration of a particular problem or idea. Many of the members of the sects believe that they will meet the creator after death and will have a chance to question the workings of the universe. For these members, preparation for the afterlife involves becoming knowledgeable about a given question, and thus being better able to debate the ultimate being. By bringing firsthand accounts of the problems of this universe, perhaps the next one can be greatly improved.

There are of course other sects that follow religions more similar to those seen on other worlds, but these are not common. There are also missions and churches from off-world religions. However, the Tellarite propensity to argue has prevented any of these sects from gaining many adherents. For example, an attempt by the Roman Catholic Church to establish a toehold on Tellarite Prime in the Y90s resulted in the formation of at least 14 different schismatic sects within a decade, none with more than 200 members.

Orion Enclave

SYSTEM SURVEY: Orion's Star

Star Class: G0V (1.11 stellar mass).

The homeworld of the Orion species is the fourth planet of a main sequence star slightly larger and brighter than Sol. The Orions call their world "Ore'nn," a word which translates into Federation Standard variously as "home," "earth," and "soil." When humans first came into contact with this species, they called them "Orions" due to the coincidental similarity of the word "Ore'nn" to the human word "Orion," as well as the presence of the Orions in the "Orion Spur" of the galaxy as seen from Earth. The species has no connection with the "Orion Nebula," which is only 1,600 light years from Earth.

There are 11 planets in the Orion system.

Planets

I. Esteh'la: A Class-F world with a sulfurous atmosphere, 5,981 miles in diameter. There is an automated navigation beacon in orbit, but the planet is not inhabited. Scientists visit it rarely.

II. Elletha: A Class-C hothouse, Venus-type environment, but larger than average, 10,775 miles in diameter. The planet has one very large moon (Thalna, 6,801 miles in diameter) and is considered a double planet by some astronomers. Thalna is airless, but home to a domed, research facility employing hundreds of scientists. The planet itself is not inhabited.

III. Onel Katuga: A Class-K desert world, 6,333 miles in diameter. This planet is colonized and is home to some 1 million settlers, but the climate is harsh and resources are limited. The colony is not particularly viable economically and growth is stagnant. This world was scheduled for extensive terraforming beginning in Y172, but the project was postponed due to the General War.

IV. Orion (Ore'nn): A Class-M planet and homeworld to the Orions. See the planetary survey.

V. Voniv: A Class-O glaciated planet, 7,215 miles in diameter. This world was once Class L, but was thrown into a deep ice age by an asteroid impact in -Y139. The Orion National Guard maintains a training base here where cold-weather-survival techniques are taught.

VI. Ameg Vand: An airless Class-D rocky planet, 4,744 miles in diameter. The planet has abundant mineral wealth and there are several mining colonies, plus a large orbital processing platform.

VII. Layor: A Class-J cold rocky world, 6,303 miles in diameter, with a thin atmosphere composed mostly of carbon dioxide. Like Ameg Vand, the planet is mined for resources.

A: There is a major asteroid belt between Layor and Glaf Nan which is extensively mined.

VIII. Glaf Nan: A Class-A gas giant, slightly smaller than Jupiter and typical for the type. There are 24 moons of any significant size, and numerous smaller moonlets. Many of these are mined for minerals.

IX. Dom'kin La: A Class-B gas giant, typical Neptune type, with 14 moons. Seven are mined for resources.

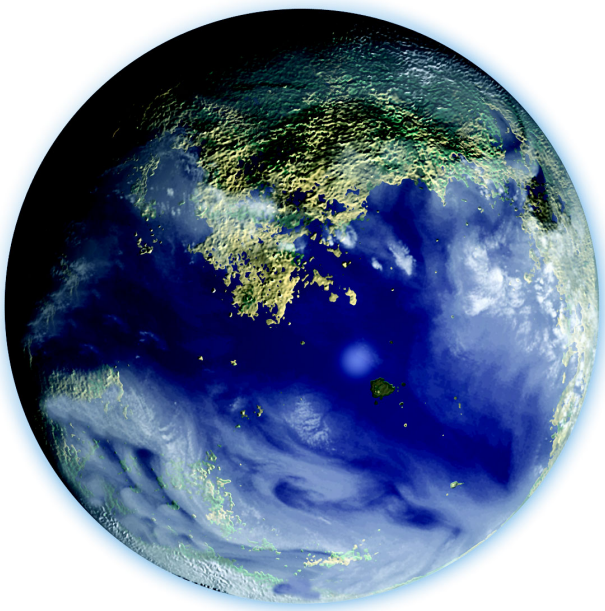
X. Ball'khan: A Class-B gas giant, similar to Dom'kin La, with nine moons, four of which are mined.

XI. Felka's World: This small Class-S methane giant is named for the famous Orion astronomer who discovered it in -Y101. The planet is home to native non-sentient, methane-eating life forms. There are a few hundred Hydrans there who arrived as visting merchants before the General War.

PLANETARY SURVEY: Orion

I. GENERAL INFORMATION

Status: Homeworld of the Orions, major industrial world.
Location: Coordinates 2812, United Federation of Planets (Orion Enclave).
Mass: 4.435 x 10^{21} metric tons.
Density: 5.7.
Diameter: 7,344 miles.
Class: M.
Surface Area: 169 million square miles.
Land Area: 58 million square miles.
Land Area as Percentage of the Surface: 34%.
Surface Gravity: 0.95G.
Mean Surface Temperature: 75°F.
Surface Pressure at Sea Level: 1.03.
Atmosphere Composition: Nitrogen 72%.
Oxygen 24%.
Argon: 3%.
Trace Gasses: 1%.
Pollution: Moderate.
Orbital Distance: 98 million miles (1.05 AU).
Day: 23 hours.
Year: 388 local days (372.3 Earth days, 1.02 Earth years).
Axial Tilt: 10°.
Population: 8 billion.



II. BIOSPHERE

A typical Class-M world, Orion is similar to Earth in many respects, with a thriving biosphere and significant mineral wealth. The northern hemisphere is girded by a huge supercontinent; this has had profound effects on Orion history. There are numerous volcanic islands and archipelagos south of the equator. The planet is tectonically active (although less so than Earth), and there are two small moons, both about one-third the size of Luna. One moon (Tehhn-or) houses a large industrial fabrication complex, the other (Akkla-or) is used as a penal facility.

PROFILE

Orions are green-skinned humanoids with copper-based blood. They evolved from predatory hominids native to their homeworld, the first recognizably modern Orions emerging about 1 million years ago. They were not "seeded" on this planet by a precursor species, but evolved independently.

Orions are mammals, and produce young in the usual humanoid way. Their gestation period is approximately eight Terran months. They reach adulthood at age 16, and have an average lifespan of 80 years with modern medical care, although some have lived as long as 110 years. Orions tend to have slightly better reflexes than the average Human. They also tend to be physically and emotionally courageous, making them well-suited (in many cases) for military service.

The Orions as a species belong to the United Federation of Planets. Some serve on Star Fleet ships and in other sectors of the Federation government. Legitimate (but aggressive) Orion merchants can be found anywhere in Federation space (and beyond).

The Orion Pirates, in contrast, are fiercely independent. Officially (according to the Orion government, anyway), the pirates (many of whom are not ethnic Orions) are simply privateers and criminals. The stories of the origins of the Orion Pirates are as varied as the pirates themselves. Some of them supposedly evolved from the mega-corporations based on the Orion homeworld. Some of the original Orion Pirates are rumored to have been a clandestine arm of the Orion government, using ships provided to them and manned by regular officers and crewmen of their own fleet. What is certain is that since their formation, the Orion Pirates have extended their operations to cover most known areas of the Alpha Octant. If the Orion government or the mega-corporations ever did control the pirates, they controlled only a few of them by the time of the General War (Y168).

The average Orion is a law-abiding citizen; many feel that the reputation of their species within the Federation has been sullied by the pirate cartels.

Orion

42 points

Attribute Modifiers: DX+1 [20].
Advantages: Fearlessness [2]; Xeno-Adaptability [20].

Note: This information is for the Orion species. Templates for professions, including cartel leaders, various pirates, and the famous Orion "Slave Girls" (who are not slaves at all, but highly paid professionals) will be found in ***GURPS Orion Pirates.***

Most Orions will add Federation Standard as a known language in addition to their native language.

III. HISTORY OF ORION

The early history of the Orion species is similar to that of other humanoids: a long pre-history spent as nomadic hunter-gatherers, followed by the development of agriculture, organized societies, city-states, and technology.

The supercontinent of Goa'pa'an in the northern temperate zone profoundly impacted the development of the species, preventing the geographic isolation of any one population group, stimulating contact between the various tribes. As a result, the Orion species lacks much of the regional ethnic differentiation found among many other humanoids. Almost all Orions have dark black hair. There are only minor differences in skin tone, which can range from dark green to a lighter greenish-blue. Although Orions avoided the kind of racial and ethnic wars that plagued humans and other species for centuries, they found other things to argue about and kill each other over, namely conflicts over resources and cultural differences.

By -Y700, there were three power blocks on Orion: the Nioban Kingdom on the western edge of Goa'pa'an, the Siiranor Commonwealth dominating the center, and the Lerel Hegemony on the eastern edge. The Southern Islands, meanwhile, were infested with "Sea Corsairs," lawless ocean raiders who made their living preying upon merchant shipping.

Siiranor collapsed into anarchy following a civil war in

the -Y680s. Dozens of small successor states, called the "Petty States," emerged in the aftermath. These states were the focus of conflict between Nioban and Lerel for centuries. Blessed with natural harbors, significant resources, an entrepreneurial social spirit, and a series of relatively enlightened monarchs, the Nioban Kingdom developed a proto-capitalist economy and began the slow process of industrialization around -Y500.

The Lerel Hegemony, on the other hand, was a more traditional "continental power," less concerned with economic development and more concerned with military expansion. The Lerel felt that the Niobans were "an empire of clerks," in the contemptuous phrase of Hegemon Ke'co (quoted in -Y495), and ripe for conquest.

The Niobans and Lerel fought a series of brutal wars over control of the Petty States. The Niobans slowly gained the upper hand, particularly after the Sea Corsairs (who had preyed on Nioban and Lerel shipping alike for centuries) were bought off and co-opted as mercenaries in -Y257, doubling the size of the already strong Nioban fleet.

The Last War, fought from -Y199 through -Y189, saw the development of TL6 technology and ended through mutual economic exhaustion. Shortly afterward, the Niobans developed primitive nuclear weapons to serve as a deterrent against further Lerel aggression. The Lerel quickly copied the weapon, and the two sides settled into a Cold-War-style nuclear-arms race. Both poured resources into high technology, including a space program. The Lerel succeeded with the first manned space mission in -Y149. Both sides planned missions to the moons as well as Voniv, the fifth planet in the system. This Class-L world was long suspected of harboring life, although there was no evidence of sentient inhabitants.

In -Y139, a large asteroid hit Voniv, causing an ice age and wiping out higher life forms. Astronomers were fascinated, wondering if the same thing could happen to Ore'nn. This triggered further advances in geology and astronomy. The discovery of ancient impact craters helped explain the mass extinctions evident in the Ore'nn fossil record. This realization changed the way the Orions viewed their place in the universe.

In -Y96, an asteroid passed close to Ore'nn. Calculations showed that there was a 50% chance of the rock hitting Orion on its next orbital approach in 15 years. Realizing that an impact would have catastrophic consequences for Orion civilization, both sides focused their space programs on stopping the asteroid.

Progress was slow. The engineering was very difficult, and both sides had financial problems funding their parallel and competing projects. Eventually, it was realized that the only way to prevent the disaster was for the two power blocks to cooperate, combining the two space programs. The asteroid was intercepted and guided into a safe orbit, with three years to spare. Subsequent calculations showed that it would, in fact, have hit the planet.

The crisis caused a massive leap forward in technology, and did much to increase understanding and cooperation between the Nioban and Lerel. Political tension eased, as Orions developed the principles of "political coordination." Research continued into advanced technology, including theoretical FTL systems.

The subspace domain was discovered by a Nioban scientist in -Y48. In -Y33, researchers detected a very strong and obviously artificial subspace signal (the so-called "Osiris Signal") originating from a G-type star some 700 parsecs distant. The confirmation of intelligence outside the Orion system sent a shock wave through Orion society, finalizing the process of "political coordination" begun due to the asteroid crisis.

Orion scientists developed non-tactical warp drive in -Y8, and the Orions began expansion to the stars. Interestingly, many of the first explorers were descendents of the independent-minded Sea Corsairs, who had never quite accepted the "political coordination" of Orion society and were looking for new challenges.

First Contact came with the Federation in Y21. After some initial tension, diplomacy was cordial, with lively trade relations. The Orions proved to be technologically advanced, and industrious. The Orions built up a significant naval force, far beyond what a nation-state of its size would be expected to construct, with missions both to protect their trading ships and their territory itself.

Orion joined the Federation in Y45, tilting the balance against the Romulans in the First Federation-Romulan War, as the extensive Orion industries came on line to feed Star Fleet. The large Orion fleet (while only a fraction of the size of Star Fleet) provided a welcome reinforcement. The special membership treaty was fundamentally a bad deal for the Federation, as Orion diplomats struck a hard bargain, inserting all manner of clauses and caveats designed to preserve Orion freedom of action in a crisis.

When the Klingons invaded in Y171, the Orions used this treaty to declare themselves neutral. The Klingons respected this neutrality and both the Federation and Klingons traded with the Orions. The Orions became something of a diplomatic go-between, arranging occasional prisoner exchanges. In one case, the Orions were able to show the Federation that a particular incident was a natural disaster, not a Klingon barbarity, defusing a dispute that could have made the General War far more unpleasant. By Y180, the resurgent Federation had driven the Klingons back from the Orion Enclave, and the Orions (sensing that the Federation would win) returned to full member status in the Federation.

IV. CULTURE OF ORION

Orion government, society, culture, and religion will be examined in detail in ***GURPS Orion Pirates.*** The following is a general overview of civilian Orion society as it relates to the Federation.

Government: Orion government is based on the Orions' somewhat unique concept of "political coordination." The planetary government is called the Ore'nn Coordination Association (OCA). The planet is divided into 87 provinces corresponding more or less with old nation-state boundaries. Provinces have a great deal of autonomy in local affairs, while the OCA manages larger economic issues, foreign relations, the Orion Military Authority (renamed the "Orion National Guard" after the creation of Star Fleet), and the Orion Space Exploration Authority (the Orion equivalent of Earth's UESPA). Elections to the OCA Assembly are held once every 10 years. While technically democratic, the OCA has been described as an oligarchy controlled by large corporations, rather than a true constitutional republic.

Personal rights such as freedom of speech and religion are respected; the government is not a police state, but the interests of business usually outweigh other considerations. The Central Political Committee of the OCA handles day-to-day affairs, as well as overseeing the Orion Enclave, which is the region of Federation space under direct control of the OCA.

During the Klingon Invasion of Y171, the Orion government invoked a nearly forgotten "emergency clause" in the Y45 Treaty, seceding from the Federation and declaring the entire Orion Enclave neutral. This was highly contentious; at least 40% of the Orion population disapproved of the government's action. Orion eventually rejoined the Federation; the political machinations involved in this controversy will be examined in ***Orion Pirates.***

Society: Very diverse. There are a variety of cultural differences between those of Nioban, Lerel, "Petty State," and Sea Corsair heritage. The old caste system social structure of the Lerel Hegemony still survives in some areas. The "Petty States" were particularly diverse; some of them came under Sea Corsair influence at various times, with results that can be described as somewhat bizarre by Terran standards.

The Orion Pirate outlaw "culture" resembles Sea Corsair culture with Nioban hyper-capitalist influence.

The Orion "Slave Girl" (or "Escort" as the few males in this profession prefer as a title) courtesan profession is completely misunderstood by outsiders. Courtesans are not "slaves" as such, and there is more than one kind of "slave girl." These range from prostitutes to companions to entertainers, and in several other directions.

Economy: Aggressively capitalist. The Orion economy is extremely dynamic, rivaling that of Sol and the various human colonies. The Enclave is quite rich, and Orion conglomerates are among the most aggressive in known space. While the Orion government denies it, there is evidence of corporate involvement with some of the pirate cartels.

Laws: Respect for private property is paramount under Orion law. There are significant local variations, especially regarding personal behavior and civil affairs. Large parts of the law code had to be adjusted to conform to Federation standards following unification. Laws are enforced mostly at the local level, although the OCA maintains a standing planetary constabulary (separate from the National Guard) to deal with serious crimes.

Religion: There are two major religions and numerous minor sects and cults among the Orions. Both major religions, and most of the minor ones, worship the monotheistic Life Goddess Ethene, whose Holy Fecundity gave birth to the Universe and everything within it. One of the major sects is avowedly matriarchic, with a strict ecclesiastical structure. The other accepts equality of the sexes, and governs its congregations on a democratic basis. After Orion joined the Federation in Y45, worship of (or at least a passing interest in) the Goddess Ethene spread rapidly among other Federation species, particularly Humans and Alpha-Centaurans.

SYSTEM SURVEY: Osiris

Star Class: G3V (1.01 stellar mass).

Osiris is the first planet of six orbiting a typical yellow main-sequence dwarf star. The "inner planet" orbital slots, corresponding to Mercury and Venus in the Sol system, are filled with dense belts of asteroids in this system. These asteroids are unusually rich in high-quality dilithium and other industrial metals. Many of these asteroids are mined.

Planets

A1: A dense asteroid belt of nearly molten rocks in an orbit of 20-30 million miles from the star.

A2: A second and separate dense asteroid belt, ranging from 50-65 million miles from the star.

I. Osiris: A Class-N oceanic world. There is one large moon, home to a dilithium refinement facility.

II. Hathor: A moonless Class-G dry desert world with a small research facility.

III. Isis: An uninhabited frozen Class-P wasteland with three asteroid-like moons.

IV. Anubis: A large Class-A hot gas giant with 12 dilithium-rich moons, all with mining stations.

V. Apophis: A cold Class-B gas giant with seven moons. All of these moons have dilithium, but the quantities are less impressive than in the rest of the system, and mining operations were not begun until the General War.

VI. Sekhmet: A small Class-Q iceball sometimes considered a comet remnant.

PLANETARY SURVEY: Osiris

I. GENERAL INFORMATION

Status: Minor industrial world.
Location: Coordinates 2811, United Federation of Planets (Orion Enclave).
Mass: 5.085 x 10^{21} metric tons.
Density: 5.6.
Diameter: 7,732 miles.
Class: N.
Surface Area: 188 million square miles.
Land Area: 19 million square miles.
Land Area as Percentage of the Surface: 10%.
Surface Gravity: 0.987G.
Mean Surface Temperature: 68°F.
Surface Pressure at Sea Level: 0.99.
Atmosphere Composition: Nitrogen 75%.
Oxygen 22%.
Argon: 2%.
Trace Gasses: 1%.
Pollution: Mild in some areas.
Orbital Distance: 94 million miles (1.01 AU).
Day: 24.5 hours.
Year: 361.5 local days (369 Earth days, 1.01 Earth years).
Axial Tilt: 19°.
Population: 100 million.

II. BIOSPHERE

Osiris is a Class-N oceanic world. There are thousands of islands, some fairly large, but no actual continents. The planet is geologically stable compared to most Class-M or N worlds; volcanic eruptions and earthquakes occur, but are rather rare, no more than 30% as frequent as on Earth. There are millions of species of fish and eels in the oceans, but nothing more advanced than plants and insects on land. There is no native sentient life, the most intelligent species being a shark-like predator. The colonists live on the islands, artificial reefs, and in subsurface domes. Although the planet itself has only average mineral wealth, the star system as a whole is remarkably rich in exploitable minerals, particularly within the asteroid belt.

III. HISTORY OF OSIRIS

The mysterious "Osiris Signal," first detected by Orion researchers in -Y33, definitely originated in this star system (it was seen by other species as well) but so far no explanation has ever emerged for what the signal was. The best cryptographers and linguists have thus far been unable to decipher the transmission, yet it was obviously of artificial origin, occurring as it did on subspace wavelengths that can only be manipulated through artificial means. The signal ceased only two weeks before Orion exploration ships reached the system in Y7.

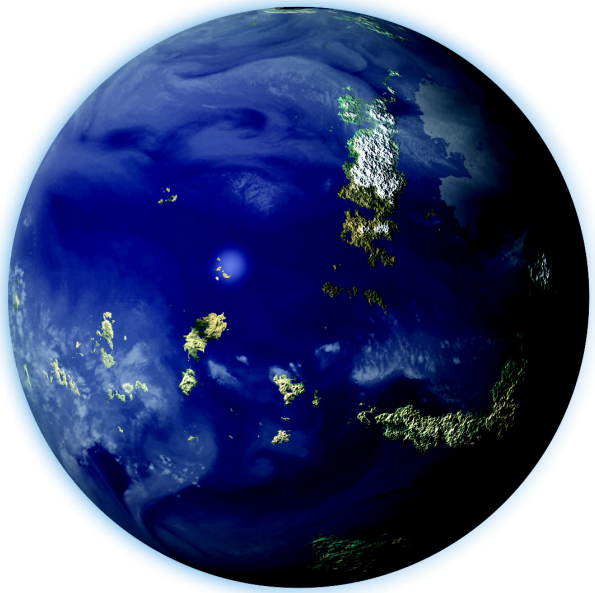
There is absolutely no evidence that native sentient life ever existed on Osiris or any of the other planets in the system. Despite its riches, the system was never exploited by the Jindarians; why is not known. There is also no evidence of any Old King presence here.

The fact that the signal was directed toward the galactic edge has led some to posit an Andromedan connection, although this is highly speculative and the idea is rejected by most experts. The Osiris Signal is certainly one of the great puzzles of recent galactic history, and holds a prominent place as a mystery in Orion popular culture. Science fiction stories and crackpot conspiracy theories about the "true nature" of the Osiris Signal are popular.

Osiris was colonized by the Orions beginning in Y20. It quickly became a critical part of the Orion economy. Osirian dilithium is the purest in the Federation, and the system also produces large quantities of other strategic minerals.

IV: CULTURE OF OSIRIS

The culture is typical Orion with growing influence from other Federation species. About 65% of the population are ethnic Orions. Humans (14%), Rigellians (12%), and Alpha-Centaurans (6%) are also present in considerable numbers. The planet is politically aligned with the Orion Enclave, which controls National Guard defenses and maintains close economic ties. Heavily defended, the system is home to several bomber and fighter squadrons as well as a full corps of Orion National Guard troops. Osiris exports billions of tons of seafood to the Enclave and the Federation, as well as industrial compounds and medicines. The asteroids in the system are very rich in dilithium, making the system a major strategic asset. Dilithium refining takes place on the moon of Osiris, enabling the citizens to enjoy a relatively pollution-free environment on Osiris itself. The standard of living is quite high, even by Federation standards.



NOTABLE FEDERATION WORLDS

There are thousands upon thousands of colonized worlds in the Federation, and millions of planets, and those listed here are only a representative sample.

Allen's Planet

Allen's Planet was established as a general Federation colony in Y119, producing agricultural goods in addition to mining iron, uranium, and pergium. Most of the population came from Earth and Alpha Centauri. The planet is Class M, orbiting a G3V yellow dwarf star. The colony was occupied by the Kzintis during the Second Federation-Kzinti War, but was returned to UFP control at the end of the conflict in Y142. The population was actually treated reasonably well under occupation, the Kzintis needing their expertise in operating the mining equipment. However, in Y145, a group of renegade Kzinti religious fanatics attacked the colony and killed all 3,000 colonists, save for one human infant. The Kzinti authorities captured and executed the renegades, and paid reparations for the destruction of the colony, which was rebuilt and served as a locus of trade between the UFP and the Hegemony in the subsequent decades. The one human infant, kidnapped by the Kzinti fanatics, was raised by a Kzinti noble who did not want the Federation to find out what the fanatics had planned to do with him. This individual, Wil Gerard, eventually returned to the Federation and joined Star Fleet. Location: 2002.

Andichron VI

Founded as a research colony by the Rigellian government in Y87, Andichron VI later expanded into a general colony producing a variety of agricultural, industrial, and commercial products. By Y170, the population had reached over 1 million. The planet is Class M, orbiting a F9V white-yellow dwarf star. Location: 3309.

Annox

This colony was the site of an important battle between the Klingons and Federation during the General War. The G4V star has no planets. An asteroid mining colony here was originally established by an Alpha-Centauran corporation in Y102 as an industrial fabrication facility, but like many colonies it expanded its operations into other fields as time advanced. Location: 2209.

Big Valley V

Big Valley V was one of the four "Western Worlds" colonized by Malcolm Levitson; see the entry on this group below. It is a Class-M planet orbiting a G1V star.

Big Valley V was colonized by the Archer Daniels Midland Company from Earth in Y144; it was a booming agricultural colony with a population of 1 million by Y170. The other planets in the Belinda system included a hot Class-I planet, a Class-C hothouse in the second orbit, a Class-D airless rock in the third orbit and a nearly identical one in the fourth, two Class-A hot gas giants, a Class-B cold gas giant, and the usual set of comets and Kuiper Belt objects. Location: 2106.

Chicago

Founded as a mining colony by Shell Dilithium in Y37, Chicago's operations were hampered at times by unusual magnetic fields that force most humanoids to sleep 18-20 hours per day. However, the immense riches of the planet make it worth the effort. Chicago has gigantic deposits of dilithium, making this major industrial world extremely important economically. The planet itself is Class L, orbiting an F8V star. Location: 3306.

Codimark

This colony is a balanced small colony with mining and agricultural operations. A Federation-sponsored colony, the population is divided about equally between Humans, Vulcans, Orions, and Tellarites, which gives it a highly unusual cultural mix. The planet is Class M, orbiting a G4V star with an M3V companion. Location: 2510.

Deiana

This is a major industrial colony which had nearly a billion inhabitants by Y170. It was founded by Malcom Levitson in Y145 as the centerpiece of the Western Worlds. Location: 2106.

Gordan's Planet

Originally settled as a military outpost during the First Romulan War, Gordan's Planet became an important general Federation colony, shipping manufactured goods and providing services to the smaller colonies and settlements along the Romulan Neutral Zone. During periods of détente with the Romulans, Gordan's Planet became an important locus of trade and diplomacy between the two powers. The planet is Class M, orbiting a G5V star. Location: 3612.

Meva

Meva was founded by an Andorian industrial tyk in Y55. The economy and population base grew rapidly, to the point where the planet requested and obtained political independence from Andor in Y159. Meva applied for separate Federation membership the following year and became an associate member of the Federation with a seat in the General Assembly in Y173. Meva remains culturally tied to Andor, but they do not always cooperate in the assembly. Their political and economic interests have diverged and Meva does not represent an "extra" vote for Andor in the assembly. The planet is borderline Class M/Class O, habitable but chilly for humans, colder than Earth but comfortable for Andorians. Location: 2704.

Morkedia III

Orbiting a G2V star similar to Sol, Morkedia III is a Class-M planet with significant mineral wealth. It was colonized by a consortium of Martian and Earth corporations in Y148. By the General War (Y171), it boasted an impressive, if small, mining facility producing dilithium, pergium, and other valuable ores. Occupied by the Romulans in Y173, it was retaken by Federation forces in Y179. Morkedia III is one of the rare examples of an analogue planet. Two worlds nearly identical to Morkedia have been

discovered: Vespasia in Romulan space and Kzmarn, a mining planet in the Kzinti Barony. The three planets are virtually indistinguishable in mass, size, composition, climate, and cartography, but none of them have native sentient life. For more information on analogue worlds, see *Mysteries of the Federation* on p. 140. Location: 3414.

Naramar III

Naramar III was founded an Orion industrial cartel in Y59 as a mining and industrial production colony. The economy grew very rapidly thanks to the rich deposits of iridium, platinum, and topaline on the planet and in the system's asteroid belt. The colonial government grew more and more independent from Orion, and refused to follow the Orion Enclave into breaking away from the Federation following the outbreak of the General War. The culture is very cosmopolitan even by Federation standards. About half the population are ethnic Orions, the remainder a mixture of Humans, Rigellians, Tellarites, and Prellarians. Naramar III is Class M, orbiting a G4V star. Location: 3005.

New Marseilles

New Marseilles was founded by a private group of human philosophical idealists in Y105, seeking a simpler life devoted to low-technology farming. The unexpected discovery of huge mineral deposits on the planet's moon drew renewed interest in Y145, and changed the focus of the colony. After much debate, the colonists signed a contract with the Weygand-Yulani Corporation, allowing exploitation of the mineral find in exchange for royalty payments and construction of a space station to facilitate shipment and processing of the minerals. A small faction of the original colonists disagreed with the decision to "sell out" and left the colony, at first returning to Earth but leaving again in Y153 to colonize other worlds. The colonists who remained at New Marseilles grew rich off the royalties paid by Weygand-Yulani, and by the General War era New Marseilles was a thriving, if small, colony world no different than any other regular colony. Location: 3504.

Novorosibirsk

In the decades following First Contact, representatives of many political and social groups left Earth to "find new worlds" where they could practice their beliefs without disrupting, or being disrupted by, the larger society. Most of these groups were benign, and their colonies survived; a few even thrived. A few colonial groups, however, were not-so-benign, being offshoots or descendents of the neo-Communists, neo-fascists, and religious fanatics who had helped set off World War III. These groups included violent religious extremists, racial supremacists, and those who rejected democracy. Almost all of these so-called "human hate colonies" died out quickly, since obtaining aid and protection from United Earth or the Federation was conditioned on renouncing hateful ideology.

Novorosibirsk was an exception. Founded by a disgruntled group of Russian and Ukrainian Marxist-Leninist-Volkovists in Y24, it was at the time the most distant Earth colony in regular contact with Earth. The immense mineral riches in the system helped keep the colony afloat, but communist economic ideology reduced economic growth. Novorosibirsk considered itself independent from Earth and the Federation for the first two decades of its existence, with limited economic contacts. However, in Y50 a famine caused by a combination of drought and poor agricultural practices forced the government to request humanitarian aid from Earth.

This discredited the hard-line leadership, but with starvation staring them in the face, there was little choice. In the Novorosibirsk Party Congress of Y52 a new, more liberal Politburo was elected by secret ballot. Surprisingly, most of the hard-liners in the old Politburo did not resist the change in government and left their posts peacefully; the two holdouts who refused to leave office were arrested.

The economy and political system were gradually liberalized and by Y90 the colony was firmly back in the orbit of Earth and the Federation, with a democratic political system, an economy in line with Federation norms, and representation in the UE government as part of the United Earth Colonial Territories. By the General War, Novorosibirsk featured a thriving economy. It was a minor industrial planet and a major Star Fleet bastion. Location: 2509.

Pacifica

One of the most beautiful planets in the Federation, Pacifica is borderline Class M/N, similar to Earth but oceanic, with thousands of idyllic tropical islands and no true continents. One of the earliest Earth colonies, by Y170 Pacifica boasted a population of over 1 billion and was a major industrial world. The economy is devoted to technological research and production of computers and precision electronics. The star is class G8V. Location: 2708.

Pollux IX

A colony controlled by several Martian industrial corporations, Pollux IX was the site of several Klingon raids before the General War, and was invaded and occupied by the Coalition during the conflict itself. Location: 2213.

Ponderosa IV

Ponderosa IV was one of the four "Western Worlds" colonized by Malcolm Levitson; see below.

Ponderosa IV was colonized by the Silent Green corporation from Alpha Centauri. The other planets included a hot Class-I planet, a Class-C hothouse, a Class-D airless rock, a major asteroid belt, a Class-A hot gas giant, three Class-B cold gas giants, and several Kuiper Belt objects. Ponderosa IV is renowned for its lush prairies, mild year-round climate, and vast herds of native herbivores. The planet exports millions of tons of meat and grain production, most of it to Deiana. Location: 2106.

Rita's Planet

Located in the Klingon/Federation Neutral Zone, Rita's Planet was one of many worlds which became a sore spot of contention between the two powers. The Federation wanted to develop this world as a general economic production colony, but the Klingons believed that it was in-

tended as an espionage facility and listening post. It was, in fact, both, and the Klingons occupied the planet during the General War. Location: 1912.

Sebelia IV

Founded by the Alpha-Centauran government in Y50, Sebelia IV is a Class-M world orbiting a G1V star with a K3V companion. The system is rich in minerals, and by the General War era mining and industrial production had made it one of the most productive colonies in this part of the Federation, and a major economic target for the Romulan invasion. Location: 3711.

Sheboygan III

A resource-rich Class-M planet orbiting a G2V star, Sheboygan III was colonized in Y135 as a Federation colony and grew into a minor industrial world by Y170. It became notable in popular culture in Y163, when the famous trivideo miniseries *The Creature that Ate Sheboygan III*, about a space monster attack on this important world, was the hit series of the summer. The series was based (allegedly) on secret records of Star Fleet encounters with some kind of "doomsday machine" planet-killer weapons. Location: 2403.

Sherman's Planet

Discovered by noted explorer Gerrold Sherman in Y140, Sherman's Planet became a major focus of Federation colonization efforts following the signing of the Organian Peace Treaty. The Federation regarded the planet (officially anyway) as an excellent location for an agricultural colony due to the temperate climate. The Klingons noted that although the planet was Class M, the native foodstuffs were unpalatable for most humanoids, and soil conditions made it very difficult to grow non-native crops. The Klingons believed that the Federation intended to use Sherman's Planet as a jumping off point for an invasion of Klingon space, and made numerous attempts to destabilize the colony through sabotage, raids, and, in the opening stages of the General War, invasion. The planet was returned to Federation control following the General War. Location: 1910.

Shiloh II

Shiloh II was one of the four "Western Worlds" colonized by Malcolm Levitson; see below.

Shiloh II was colonized by the Bersheeba Corporation from Earth and became an entirely Jewish colony with a population of 1 million in Y170. The other planets in the system included a hot Class-I planet, a Class-C hothouse in the third orbit, a Class-D rock in the fourth, two Class-A hot gas giants, two Class-B cold gas giants, and the usual comets and Kuiper Belt objects. Location: 2106.

Sigma Draconis

Founded by United Earth in Y50, Sigma Draconis is actually home to two Class-M planets orbiting the F9V parent star, both of which are colonized. The inner planet is agriculturally rich, the outer planet boasts immense mineral wealth. The combined riches of the system make it critically important to the Federation economy. In Y159, Sigma Draconis gained independence from United Earth and eventually became an independent member of the Federation with a seat in the General Assembly. Location: 3509.

Southfork IX

Southfork IX was one of the four "Western Worlds" colonized by Malcolm Levitson; see below. This star system was in the early stages of formation, with no less than eight small Class-I and Class-D planets within 70 million miles of the star. Within another half billion years, those eight planets were destined to collide and merge into three normal-sized planets, but what will be the fourth planet was already fully formed. A Class-A hot gas giant and two Class-B cold gas giants, along with comets and Kuiper Belt objects, completed the system. This planet was colonized by the Mars Agricultural Corporation. Location: 2106.

Thetis

Thetis was originally colonized by the Vulcan government as a scientific research facility in Y125. By Y170, operations had expanded to include mining from the system's asteroid belt, enough agriculture to feed the local population, and small-scale industrial production of consumer goods for the local provincial market. It was occupied by the Klingons in the General War. Location: 2314.

Vega Colony

Established on the ninth planet orbiting this A0V blue-white star 25 light years from Sol, this is one of the earliest extra-solar Earth colonies, founded in Y9. The colony is devoted to mining and resource extraction, shipping ores and metals to Earth and Mars for industrial processing. Location: 2908.

Western Worlds

Early explorers of the region near Mantor and Cygnus discovered four Class-M planets in different systems but all relatively close to each other. The problem was that the region was disputed with the Kzintis, who would not tolerate Federation colonies. After the Second Federation-Kzinti War, Captain Malcolm Levitson retired from Star Fleet, bought some war surplus ships, and moved quickly to claim the four worlds, reaching deals with various corporations for their development. Levitson, a fan of ancient television, named them after his favorite series: Shiloh II, Big Valley V, Ponderosa IV, and Southfork IX. With the profit from these planets, he founded the industrial colony of Deiana.

Zeta Reticuli

Located 39 light years from Earth, Zeta Reticuli is home to a research colony examining the ruins of the Old King trading base that was located on a Class-M planet in this system. Little is known about the Old Kings, but much of what we do know comes from examination of the few artifacts they left behind at this world. The planet is under "research quarantine," with only qualified scientists and academics allowed to visit. Location: 2908.

NOTABLE NON-FEDERATION WORLDS

There are tens of thousands of inhabited planets located within Federation space which are not member worlds or colonies. Here is a brief selection of such worlds. More will be presented in future products, and of course imaginative GMs should create their own.

WORLDS UNDER PRIME DIRECTIVE PROTECTION

There are hundreds of worlds with sentient life which are under the protection of the Prime Directive. Most of these planets are completely off-limits to outsiders. A few are covertly visited or studied by Star Fleet or other certified investigators if authorized by the Federation Council. Of course, criminals (most notably the Orion Pirates) visit such worlds illegally when there is profit to be made.

Gamma Artemis III

Located at coordinates 3707, this is a Class-M world orbiting a K2V star. In Y156, the *USS Potemkin* surveyed this planet and discovered primitive humanoids living in "caveman" type conditions with TL0 technology. The planet was placed under full Prime Directive protection. Sensor beacons were placed in the system to warn Star Fleet of any unauthorized encroachments. A Romulan starship investigated the system during the General War, but the Romulans ignored the natives and merely took soil and mineral samples.

Tenoria V

Originally surveyed by a Rigellian exploration ship in Y153, Tenoria V is a Class-M planet at coordinates 2212 and orbits a G3V star. The planet is home to native sentient amphibians who live in Bronze Age and Iron Age conditions in tidal pools and swamps. During a routine check on this system in Y160, the *USS Kongo* discovered Orion Pirates had been trading with one ethnic group on the planet, offering them "advanced" technology (such as gunpowder) in exchange for native plants which had strong narcotic effects on humanoids. *Kongo* captain Kosnett managed to clean up the resulting cultural contamination through skillful negotiation (as well as some creative blackmail of an arrested Orion Pirate captain).

Alpha Veras IV

A Class- M planet in a trinary star system (star classes G4V, M1V, M2V) at coordinates 2302, Alpha Veras IV is home to a balkanized society of humanoids who may be related to the Tellarites. Divided into more than 100 nation-states, this planet is torn by ethnic and political strife, grown increasingly destructive as the planet develops technologically (rated at advanced Industrial Age in Y160). In Y162, the *USS Carolina* was dispatched to the planet to investigate reports that an illicit Cygnan Seranaya religious mission had been established here, the Cygnans wanting to "enlighten" the natives to adopt less destructive ways. The *Carolina's* resulting mission report and relevant logs were classified Top Secret, but the ship was recalled to Earth and the captain reported directly to the Federation Council. Leaked extracts of his testimony indicate that the Cygnan religious mission may have gone awry and been responsible for an increase in religious strife on the planet.

Janus VI

A Class-F planet with a poisonous atmosphere, Janus VI orbits a K2III red giant star at coordinates 2110. A treasure-trove of mineral wealth, including huge deposits of pergium, uranium, platinum, cerium, and gold, the planet was colonized by Tagger Pan-Galactic in Y105, but the dangerous environmental conditions make mining difficult, reducing production from what it would otherwise be.

In Y156, the mysterious deaths of several miners were traced to a native sentient life form, the silicon-based Horta. Negotiations revealed that the Horta, a peaceful creature at heart, was willing to share the planet with the miners, and even aid in mining operations, provided that her eggs and offspring were undisturbed.

Further exploration, however, showed that there were many "tribes" of Horta on the planet, each independent of the others, and some of them were far less interested in sharing the planet with humans. Other tribes wanted to deal with the Federation on a commercial basis. After much debate, the Federation Council prohibted any other mines from being opened, and placed all of the planet (except the area of the First Contact) off limits pending further negotiations. Even that area was subject to a future treaty negotiation when the hatchlings came of age.

By their nature, no Hortas were interested in traveling off world so Hortas are not available as player characters.

WORLDS UNDER PROTECTIVE QUARANTINE

Some worlds are placed under Protective Quarantine. The term may be deceptive: this quarantine is not to protect the planet from outsiders (that is what the Prime Directive is for), but rather to protect the Federation and its citizens from the planet in question. Some examples:

Valentina III

First surveyed by the UESPA science-probe vessel *Valentina Tereshkova* in Y149, this is a Class-M planet orbiting a G2V star at coordinates 2110. The humanoid civilization of this world (possibly related to the Arcturians) destroyed itself through biological warfare about the year -Y350. The world had just reached the early spaceflight level. Studies showed that the virus was 100% lethal to Arcturians and most other humanoid species, including Humans, but that Klingons and Bargantines were immune. Fearing that the virus would fall into the hands of the Klingons, a Star Fleet task force bombarded the planet, virtually sterilizing its surface, as part of the top-secret Operation Jericho during the retreat in the initial weeks of the General War.

Vereb IV

A Class-L world orbiting a F9V star at coordinates 2903, Vereb IV is home to the terrifying Wasp People, a species of sentient insects who seek humanoids as food for their larvae. The Wasp People kept humanoids native to their

homeworld as food stock for millennia, but the livestock gradually died off (it is unclear how or why) and the Wasp People were forced to move out into space in order to survive. Using primitive warp-powered starships, they were apparently responsible for the disappearance of numerous UFP vessels and colonists over a period of several decades, using the captured people to reestablish their livestock, until they were finally recognized and their system placed under strict quarantine in Y119. All attempts to negotiate or communicate with the Wasp People have failed. Star Fleet and the Federation Police maintain a strong patrol near the system, and any Wasp People ships which attempt to leave the system are destroyed on sight. There have been numerous proposals to invade Vereb IV and liberate any humanoids who may still be kept as livestock there, but the GIA estimates that the total Wasp People population likely exceeds 12 billion, more than half of them military drones, and that a successful invasion or rescue mission would be virtually impossible. The Council found no support for a Star Fleet plan to bombard the planet.

Yeney'vn

Yeney'vn is a Class-M planet orbiting a G2V star with a G4V companion at coordinates 3108. Red-skinned humanoids that appear to be distantly related to the Dunkars of the Klingon Empire, the Yeney are extremely xenophobic and live under a vicious military dictatorship. They possess non-tactical warp drive and have colonized four star systems in the immediate vicinity of their home system, but they have been prevented from expanding further by the Federation. The Yeney refuse to open diplomatic relations with the Federation. Orion Pirates have had some dealings with them, but the Yeney are so xenophobic and hateful that even the Orions have problems relating to them.

Talos IV

The Talos Star Group is a small cluster of 12 stars located in hex 3002. Two of these stars (classes G3V and K3V) form a close binary with a system of 11 planets orbiting their center of gravity. The fourth planet of the system is home to a dying humanoid species with great mental power. At one time this civilization was warp capable, but it destroyed itself through warfare over 200,000 years ago. In Y142, a Federation heavy cruiser (responding to a falsified distress signal) discovered that the planet's surviving inhabitants possessed powerful mental abilities, could control humanoid minds with illusions, and were seeking slaves to help them rebuild their world. The cruiser escaped, but the captain recommended that the planet be placed under the strictest quarantine possible. Limited contacts with the Talosians occurred in the subsequent decades, but formal relations were never established and the world remained off-limits to outsiders. There are continual rumors that someone in or connected to the government has contact with the Talosians, providing them with volunteers to repopulate their planet in exchange for technology and ancient historical knowledge.

FRIENDLY INDEPENDENT WORLDS

There are dozens of worlds within Federation space which have high technology and friendly relations with the UFP, but which are not members. Trade relations and cultural exchanges are usually established with such worlds. Some examples include:

Bis'en

Native to a Class-M planet orbiting a G9V star at coordinates 2806, the Bis'en are a species of sentient humanoid felines. They are not related to the Kzintis or Lyrans, but may be distantly related to the Korlivilar of the ISC. The Bis'en have had friendly relations with the Federation for more than a century. Their culture is compatible with Federation norms, in terms of respecting sentient rights and having a free political system, and the Bis'en would be accepted with open arms into the UFP. However, the species is fiercely prideful and prefers to remain formally independent. Nevertheless, Bis'en diplomats can frequently be found within the hall of the Federation Assembly. Trade relations are very close. A small number of Bis'en serve in Star Fleet, and the Bis'en military cooperates closely with their Federation counterparts.

Fnanla

Inhabiting a Class-O world orbiting a K5V star at coordinates 2604, the Fnanla are beings of conscious energy and were discovered by the survey ship *Amerigo Vespucci* in Y155. Few energy beings have much use for direct communication with corporeal life, but the Fnanla are a notable exception. Although the Fnanla never leave their homeworld and are not interested in joining the Federation, they delight in engaging visitors in philosophical debates over most any issue. They often give vague Delphic pronouncements, which the popular media refers to as Fnanla Riddles. An entire cottage industry has grown up around "interpreting" these riddles and what they mean for the future, similar to the legend of Nostradamus on Earth or the Speakings of the Prophetess Seria on Orion.

Mezan

The Mezanites are descended from primitive Homo sapiens seeded on this world about 100,000 years ago. As such they are genetically almost identical to modern Earth humans. Inhabiting a Class-M planet orbiting a G4V star at coordinates 3013, the Mezanites were post-industrial (1930s era) and politically balkanized when a Rigellian ship crashed on their planet in Y148. The crash was in a populated area and could not be hidden from the population. The Federation starship *Excalibur*, under Captain Jack E. Fisher (who later became famous as an admiral and important military theorist during the General War) was dispatched to deal with the contamination and see if the Mezanites could deal with knowledge of the wider galaxy. Through deft diplomacy, Fisher was able to convince most (though not all) of the Mezanite governments that they had to cooperate and set aside their bickering. Mezan made gradual, halting progress toward unity and Federation membership, becoming probationary members in Y220.

Antares, continued from page 71

standards, but with the economic boom that came from joining the Federation, the changes did not bankrupt the government.

Laws: Adjusted over time by the Takrutist Regime to accord with Federation standards, although substantial revisions in the areas of individual rights were still necessary before Antares was allowed to join the Federation.

Religion: About half of modern Antareans are atheistic or agnostic. About 40% are members of the various sects of the Erec faith, a monotheistic religion similar in some ways to human Abrahamic faiths or Klingon Kavarism. The Erec revere the *Holy Book of Wisdom*, although the most literal (and popular) interpretations of this book became untenable after First Contact. Most Erec sects eventually adapted their teachings to account for reality, although a few holdout denominations have clung to the old views. The remaining 10% of the population adhere to smaller, non-Erec faiths or cults, or religions from off-world.

Cygnans, continued from page 77

tered on the numerous myths and legends about the Sky Fathers and their gifts and teachings. The teachings are remembered as enjoining them to explore and share those gifts. Just as the Sky Fathers came from the stars to light the Cygnans' way to a more advanced society, so too do the Cygnans feel the urge to enlighten less advanced peoples. Personal growth, social progress, and ethical conduct are considered their own reward. For most Cygnans, the reward of an afterlife does not enter into the calculation.

The most devoted adherents to The Ways have established illicit "Seranaya Missions" on more than one pre-starflight world, designed to bring technology and "ethical enlightenment" to struggling species. Such missions are, of course, illegal and violate the Prime Directive.

Deians, continued from page 79

Arrested by the religious authorities of one powerful nation-state, she was tried and convicted of heresy and sedition. Before her public execution, however, she "disappeared" into the sky in front of hundreds of witnesses. The story was well documented and could not be suppressed. Her teachings spread like wildfire, and by -Y475 the Arillai sect was the dominant religion among the Deians, although there were various theological variations.

Researchers note that the story of Arilan is extremely similar to that of Jellar, a religious prophet of the planet Dunkaria who also "vanished" in front of many witnesses. There are also similarities to the Prophet Nin'kul of the Klingons, the Prophet Akkna of the Zoolies, the Great Teacher of the Orion Life Goddess religion, and messianic figures from various Earth religions. Whether this is due to divine inspiration, random chance, intervention by aliens,or some other factor is a major point of contention among scholars of xenospirituality.

About 70% of modern Deians adhere to some variant of Arillai belief. About 20% are atheist or agnostic, while the remaining 10% adhere to smaller pre-Arilan religions, cults, or non-Deian beliefs.

Frallia, continued from page 81

interplanetary travel within their own star system, using fission-powered spacecraft, and were beginning research into faster-than-light drive systems.

Military equipment was backward in comparison to civilian technology. This was a function of their unique bioelectric abilities; warfare was conceived as a contest between small numbers of noblemen and supporting knights. Mass mobilization, attacks on civilians, and industrial methods of warfare were alien concepts to the Fralli. Fission and fusion were used for peaceful purposes of power-generation and transportation. Scientists were aware that atomic and thermonuclear weapons were theoretically possible, but actual development of such weapons was unthinkable for political and religious reasons. Even the limited use of gunpowder weapons and explosives was considered distasteful and avoided as much as possible.

This was a saving grace, since in many other respects, Fralli social culture was akin to that of the Middle Ages on Earth. Politics were Balkanized, with power spread between 75 different nations and city-states. Almost all of these states had a hierarchical societal structure, with caste systems and strong distinctions between social groups along generally feudal lines. There was considerable political turmoil. On the other hand, the Fralli are relatively homogenous ethnically and religiously, sparing themselves arguments over such topics. Most conflicts involved power struggles between various families of nobles, and had little impact on the average citizen.

On August 14, Y102, the Federation Early Command Cruiser *Pyotr Velikiy,* while on a star-mapping mission in what was then an unexplored sector of space, detected a warp drive signature. Investigating, they discovered the Fralli warp prototype *Soaring Lucky Bird* making her fourth test flight. Diplomatic relations were established. While many Fralli factions were interested in joining the Federation, the Balkanized political structure and backward social development made this problematic. It was not until Y139 that the Fralli were accepted as prospective members of the Federation. They became associate members in Y165, although even this was considered controversial.

The number of Fralli serving in Star Fleet is relatively small. They gravitate toward the engineering and scientific professions, although there are exceptions.

IV. CULTURE OF FRALLIA

Government: The Fralli established the World Directorate in Y130, as a step toward the planetary unity necessary for Federation membership. In theory, this is a democratic body, with power divided between the elected Representative House and the hereditary Gathering of Nobles, presided over by an elected Chancellor. In reality, almost all effective power still resides with the noble elite of the

various nation-states. Although the franchise is legally open to all adult Fralli, in many jurisdictions females and members of minority social castes are strongly discouraged from participating in politics by application of social pressure.

Society: Although officially in line with Federation norms, in many areas there are still sharp distinctions between social classes. Males and females are legally equal, but in reality sexism is still rampant. Fralli who adopt a more liberal philosophy often emigrate, either to off-world colonies where like-minded Fralli congregate, or to more egalitarian Federation worlds. Many Fralli who join Star Fleet are females seeking to escape traditional strictures.

Economy: Merchant guilds and cartels dominate the economy. Electronics make up the primary exports to the rest of the Federation.

Laws: Although officially adjusted to accord with Federation norms by Y160, the old ways die hard. Law enforcement is conducted at the local level.

Religion: There are two major religions. The largest religion is Lafranism, a polytheist belief system with a wide pantheon of gods, goddesses, demigods, and spirit helpers who watch over various areas of life. About 50% of the population adheres to this faith or a variant thereof. About 30% of Fralli follow Yorehta, a monotheist faith that posits the existence of the benevolent creator god Hethrayor. Many Lafranists incorporate Hethrayor into their pantheon, but fortunately most Yorehtists are not offended by this practice. The other 20% of Fralli follow smaller sects or cults, or are secular in orientation. The number of Fralli adhering to off-world faiths is miniscule. Almost all Fralli religions incorporate astrology into their systems and are rather fatalistic in approach, emphasizing that "things are the way they are for a reason." This helped prevent conflict and wars, but also retarded social progress.

Mantor, continued from page 83

compared to the traditional humanoid standard. Most Mantorese of both sexes have several casual paramours, as the concept of sexual jealousy is virtually unknown to them. Any offspring from mates other than the "primary" is raised as a member of the nuclear household without reluctance of social castigation. This dynamic operates among virtually all Mantorese ethnic, cultural, and social groups.

Economy: Technically free-market capitalist, although dominated by large trading guilds with oligopolies in many industries. The Mantorese economy (like Mantorese society in general) tends to alternate between short bursts of tremendous growth and change, followed by long periods of widespread stagnation. Large industrial cartels dominate manufacturing and industry. Many of these cartels have close ties with off-planet corporations, particularly Human, Orion, and Tellarite companies; some of these outside corporations have been accused of exploiting the Mantorese unfairly. Kzinti influence is also a major factor in some sectors of the economy. While the Mantorese have a relatively high indigenous technological base, and plenty of natural resources, vast pockets of poverty and misery (by Federation standards) existed on the planet as late as the Second Federation-Kzinti War of Y136. The economy improved after Y160, leading to a higher standard of living for most.

Laws: The Mantorese legal code is extremely complex, although it has been brought into accord with Federation standards in regards to sentient rights and freedom of the person. Local magistrates were notoriously corrupt and open to outside influence. Although this problem eased after Mantor joined the United Federation of Planets, it did not subside entirely.

Religion: There are three major religions on Mantor, plus numerous smaller sects and cults. About 30% of the population are non-religious, agnostic, or atheist. The largest of the major religions (about 30% of the population) is nature based and similar to human neo-paganism in general approach and emphasis. The second religion (about 20% of the population) is monotheistic and quite similar to the Klingon religion of Kavarism and Human Judaeo-Christianity. The third religion (about 20% of the population) emphasizes ethical and moral behavior but is non-theistic; it has some similarities to Vulcan beliefs as well as Human Buddhism.

Federation Marshals, continued from page 39.

Operation/TL (Surveillance) IQ [2]; Expert Skill (Xenology) IQ-2 [1]; First Aid/TL IQ [1]; History (Recent Federation) IQ-2 [1]; Intelligence Analysis IQ-2 [1]; Interrogation IQ+1 [4]; Judo DX [4]; Karate DX-2 [1]; Knife DX [1]; Law (Federation) IQ [4]; Leadership IQ-1 [1]; Observation Per-1 [1]; Professional Skill (Law Enforcement) IQ+1 [4]; Psychology IQ-2 [1]; Research/TL IQ [2]; Savoir-Faire (Law Enforcement) IQ+1 [2]; Shadowing IQ [2]; Stealth DX-1 [1]; Strategy (Space) IQ-2 [1]; Tactics IQ-2 [1]; Vacc Suit/TL DX [2].

Experienced Marshals typically have some of the following Advantages: Combat Reflexes [15], Danger Sense [15], Fearlessness 1-5 [2-10], G-Experience (All) [10], High Pain Threshold [10], Indomitable [15], Intuition [15], Single-Minded [5], or Unfazeable [15].

Experienced Marshals typically have acquired some of the following Disadvantages: Code of Honor (Cannot Harm Innocents) [-10], Curious [-5], Honesty [-10], Intolerance (Of Criminal Behavior) [-5], Obsession (Capturing specific person) (12) [-5], Sense of Duty (Fellow Law Enforcement Officers [-5], Sense of Duty (Law-Abiding Citizens) [-10], Sense of Duty (Legal System) [-5], Truthfulness [-5], Workaholic [-5].

Experienced Marshals may have acquired many skills; these are among the most common: Brawling DX+1 [2]; Detect Lies Per [4]; Fast Draw (Pistol) DX [1]; Forensics/TL IQ [4]; Free Fall DX [2]; NBC Suit/TL DX [2]; Piloting/TL (Shuttlecraft) DX [2]; Search Per [2]; Spacer/TL IQ [1]; Streetwise IQ [2].

FEDERATION MILITARY FORCES

OVERVIEW

The United Federation of Planets, like most if not all democracies, finds its military to be an expensive necessity forced upon its budget by aggressive foreign enemies. The Federation has no interest in invading or conquering anyone, and as such, the only reason to have a purely military force is to defend against foreign invasions, which are considered an extremely dangerous and annoying (if rare) inconvenience.

The point of a defensive military is not just to fight wars which are thrust upon a peaceful nation, but to be strong enough to dissuade enemies from invading in the first place. This becomes a matter of cost vs. risk. No one can ever truly know if the deterrent worked, unless that deterrent fails. As such, a successful deterrent might very well have been stronger (and more expensive) than it really needed to be. No one really knows, and politicians anxious to spend some of the military budget on other projects constantly argue that the military could be just a little smaller than it currently is.

Due to the nature of the Federation (a vast territory of outer space) the most important part of the military is Star Fleet, the "navy" which drives starships around between stars and planets. Ground troops are a relatively minor part of the military forces because they are expensive to maintain and hard to move around. Small specialized units of ground troops (Marines and Prime Teams) are used for key missions.

In order to get the most out of the military, the government of the Federation assigns the military no end of supplementary (non-military) missions, including exploration, disaster relief, and research.

Exploration is a valid and important mission, and many in Star Fleet (and the government) consider it their true and primary mission or their highest calling. Ships on patrol in a given area (waiting for some emergency) can keep themselves busy by visiting unoccupied star systems and surveying planets for potential colony sites or easily recovered resources. Politicians often pressure Star Fleet to explore certain systems, to look for certain kinds of resources, or to send a ship to patrol a given sector more for the exploration benefit than any real military need. Because the result of Star Fleet's explorations are available to all member worlds (through the Bureau of Navigation database), this becomes a zero-cost means of getting preliminary survey data for potential sponsored colonies.

Disaster relief is another valid mission, and often saves thousands, if not millions, of lives. Star Fleet has the fastest spaceships and can reach planets within hours or days. Starships come with a few doctors and engineers, a small amount of special supplies, and a wealth of sensors, communications equipment, and computer data files. Any starship captain can provide not simply small amounts of immediate assistance, but he can call in and coordinate vast amounts of assistance from other military units and civilian authorities.

While major planets suffer major calamities (tsunamis or mega-volcanoes) only rarely, small colony worlds are far more vulnerable to natural disasters, since they have fewer resources, and tend to have their population in a few small areas. A major inhabited planet that has even a huge disaster affecting an entire continent will have major resources immediately at hand on other continents. A colony world with a few thousand people won't have very many resources to start with and many of those may have been destroyed by the disaster. Here, starships are invaluable, as the limited services, personnel, and supplies available from a typical cruiser will be of far more help to a few thousand people than they would to a few billion.

The military also conducts no end of research on scientific, medical, and engineering matters. This is partly a matter of self-service, in that research on new materials would allow Star Fleet to build better starships for less money. Any basic research the military develops, however, becomes available royalty free to the entire Federation as quickly as it is found. An improved warp engine might be fitted to a hundred warships over a decade, but could be fitted to a thousand civilian freighters in a year or two. Politicians are constantly pressuring Star Fleet to focus research on areas of immediate economic benefit to their own planets, and slow to provide extra research funding.

The military is often called upon to support the police forces in piracy prevention, border control, and law enforcement. This is one of the ways that the overall budget is kept low (by funding smaller police forces, then relying on the military to back them up). It is also a way to justify the military expense, in that expensive military forces are not just idly waiting for a foreign invasion or a natural disaster, but actually doing something useful that is at least marginally associated with their primary mission. Without Star Fleet, the (space) police would be larger so that it could send extra ships to areas with increased pirate activity. Instead, the police can simply call for Star Fleet to send a few warships to the area.

Police forces provide most of the border patrols, since the primary duty of such patrols is to stop smugglers and pirates from crossing the border. A dozen small police cutters can do this far better than a Star Fleet dreadnought

that could only be in one place at any given time. That said, without Star Fleet, the police would have to have a few larger ships to "stiffen" the border against armed foreign intruders.

Law enforcement is normally handled by the police (space or ground), but in extraordinary circumstances, Star Fleet ships could quickly move thousands of armed and organized ground troops to a planet with some major problem occuring.

In the end, the Federation military is what it is: an armed force on call for a wide variety of problems, many of which require actions other than armed combat.

STAR FLEET

Star Fleet is the Federation Navy. Unlike a 20th-century empire on Earth, in which the Navy is only a small and secondary part of the overall military, Star Fleet constitutes the bulk of the Federation's armed power. Star Fleet consists of hundreds of armed ships, ranging from small frigates to a small number of massive dreadnoughts. Star Fleet actually has more non-combat ships than warships, counting supply, maintenance, auxiliary, and other vessels.

Star Fleet is a military organization, with military rank, insignia, and medals (detailed in the ***GURPS Prime Directive Core Rulebook***), as well as military regulations and principles. The ***GPD*** also includes most of the needed data on weapons used by individuals.

Star Fleet Organization

Star Fleet is organized into numbered fleets, each assigned to a given area. In wartime, additional numbered fleets can be created, and ships can be borrowed from fleets on unthreatened borders.

Star Fleet Headquarters: Based on Earth, this is the command and control headquarters for all of Star Fleet. It issues directives to the numbered fleets.

First Fleet: Also known as the Home Fleet, this is the strongest of Star Fleet's numbered fleets. Based in the capital area, its ships are theoretically the least active, and include new ships undergoing their shakedown cruises, and ships just returning from extended patrols or maintenance periods. In practical terms, much of the Home Fleet is deployed (although not on the borders) on routine patrols in the central areas. This fleet had the most "combat stars" as it had been sent to the front lines of the two Kzinti wars (Y88 and Y136), the first Romulan war (Y40), and the first Klingon war (Y110). Politically ambitious officers served their "in space" tours here and then quickly returned to Star Fleet Headquarters. When the Klingons invaded in Y171, the First Fleet deployed to the Klingon front and fought there for the balance of the General War. The unofficial title of "home fleet" passed to the Eighth Fleet.

Second Fleet: Regarded as the premier peacetime posting for those who think survey duty is the highest calling, Second Fleet is the exploration fleet, including the survey cruisers. One way that the Federation stretches its budget is to count on some of these survey cruisers to report for active wartime duty during any emergency or invasion. Most of this fleet operates between the capital area and the galactic core region: territory that is largely unexplored and uninhabited. Even during the General War, this fleet remained on survey duty (finding resources to support the war effort) rather than deploying to the fighting fronts.

Third Fleet: Regarded as the elite combat formation for a decade prior to the General War, this fleet is deployed on the Klingon border. An assignment to this Fleet is a prize for those captains who are considered aggressive and combat-minded. This fleet was considered (in the years before the General War) to be the fleet most likely to be attacked by a foreign invasion, a prediction that proved to be all too accurate. Third Fleet was often called "the new elite" since the Fourth Fleet had previously been the one most involved in combat. The Third Fleet was all but destroyed by the original Klingon Invasion of Y171, but was reorganized and filled with new ships and was back to full strength by Y174, when it entered the front line between the First and Fourth fleets.

Fourth Fleet: This unit is deployed on the Kzinti border. The traditions of this fleet ran deep, as they came from people who (a generation or two before the General War) had fought two wars (Y88 and Y136) against the savage Kzintis. While the Third Fleet expected to go to war at any moment, the Fourth Fleet thought that it was more likely to go to war, but that it would be sent to help the Kzintis during the Second Four Powers War. (Many felt that the Klingons would never attack the Federation, but that the Federation would eventually be forced to send ships to help the Kzintis resist the Klingon invasion that began three years before the Klingons attacked the Federation.) When the Klingons invaded in Y171, this fleet became part of the Klingon Front, fighting side by side with the First Fleet (and the rebuilt Third Fleet) for the remainder of the General War.

Fifth Fleet: Regarded as something of a backwater, this fleet was deployed on the Gorn border. It was considered all but impossible for the Federation to go to war with the Gorns (another democracy which became the Federation's best friend after the initial skirmishes proved to be a simple misunderstanding) and very unlikely that the Gorns would need help against the Romulans. Assignment to the Fifth Fleet was considered a career ender, and morale was lower than in other fleets. When the Klingons invaded, about half of this fleet was transferred to the Klingon Front, where it became the core of the new Ninth Fleet. The balance of the Fifth Fleet joined the Sixth Fleet in conducting a fighting retreat after the Romulans invaded in Y174. Filled with new ships, it eventually assumed the offensive and helped drive the Romulans back to the border.

Sixth Fleet: Deployed on the Romulan Border, the combat traditions of this fleet (from the First Federation-Romulan War in Y40) had been all but forgotten. The brief incident in Y154 was regarded as an aberration. The Period of Detente with the Romulans (Y160-Y170) led the Federation to assume that this border would never again become an active combat front. By the time the Romulans became restive and Romulan "privateers" were raiding

Federation outposts, the Klingon Invasion had begun and there were few ships to spare for the Sixth Fleet. Indeed, the Sixth Fleet had become known as "the boneyard" as it was sent the oddball ships not wanted by the elite Third Fleet (e.g., the strike cruisers of the *Prometheus* class and the old "R" class of older heavy cruisers). When the Romulans invaded in Y173, the outnumbered Sixth Fleet retreated in good order (having studied the lessons of the destroyed Third Fleet) until the Romulan invasion had outrun its logistics. The Sixth Fleet continued to fight the Romulans as the center of the Romulan Front until the end of the General War.

Seventh Fleet: The smallest of the fleets, this unit was deployed on the Tholian border. The Tholians posed no real strategic threat, but were known to be decidedly unforgiving of any border incursions, and Seventh Fleet spent as much time keeping Federation civilians away from the border as it did watching the Tholians. The Tholians were likely to start shooting at the instant they felt threatened, and the ships of the Seventh Fleet all bore scars of phaser damage on their hulls. Destroyer *Ares* was lost on a mission near Tholian space (Operation Brown Recluse), trying to locate and rescue Federation citizens reportedly used as slave labor by the Tholians. When the Romulans invaded, the Seventh Fleet became part of the Romulan Front, avoiding the trap that the Coalition set for it. Filled with new ships, the Seventh Fleet remained the "right flank" of the Romulan Front throughout the General War, and led Operation Wedge that cut the links between the Klingons and Romulans.

Eighth Fleet: This was originally Star Fleet's training organization. It had relatively few ships, and what ships it had primarily functioned as a "finishing school" for recruits and cadets who had completed their basic training.

The Eighth Fleet had another role, however, which was to maintain the reserve "mothball ships." Star Fleet knew that it would need more ships in wartime than it did in peacetime, and the solution was to take older ships out of active service while they still had a few good years left and store them in the capital areas. These ships had very small crews who performed continual checks and maintenance on the systems. This fleet had nearly 50 mothballed warships at the start of the General War (it was, technically, the largest), and it was these ships, hastily "warmed up" and filled with reservists, that formed the final defensive barrier against the Klingon and Romulan invasions before they could reach and devastate the capital worlds.

During the General War, this fleet became the new "home" fleet and controlled the ships and bases in the capital area.

Ninth, Tenth, Eleventh, and Twelfth Fleets: These fleets were inactive in peacetime, but had small active duty staffs, a few (mostly non-combat) ships, extensive "war reserve stockpiles" of spare parts and ammunition, and were prepared to be activated in wartime. (Any military organization requires records of what units it has, and the staffs of these reserve fleets were "prepared to start keeping those records" if the fleet were activated and ships were assigned. If Star Fleet needed another headquarters to control expanding numbers of ships, the staff officers assigned to these fleets were already on duty and prepared to organize their operational plans and logistical support.) The Ninth and Tenth fleets were activated after the Klingon Invasion, while the Eleventh and Twelfth Fleets "stood up" when the Romulans came across the border two years later.

Thirteenth and Fourteenth Fleets: These units were created late in the General War to control the rear areas after the primary fighting fleets had moved forward, driving the Klingons and Romulans back to the original borders. They were primarily "area control" fleets rather than fighting organizations, but did control convoy traffic, rear area security, and logistics. The Thirteenth Fleet supported the Klingon Theater (First, Third, Fourth, Ninth, and Tenth Fleets) while the Fourteenth Fleet supported the Romulan Theater (Fifth, Sixth, Seventh, Eleventh, and Twelfth Fleets).

Star Fleet Academy

Star Fleet Academy is not simply the four-year university where promising youths earn engineering degrees and military commissions, but includes the whole gamut of Star Fleet's education system, including the War College, the Staff School, the Command School, the Advanced Leadership School, and the Medical School.

University: The institution most people think of when they hear the words "Star Fleet Academy" is located in San Francisco on Earth. It is a traditional four-year university, with thousands of students from every member world in the Federation, as well as many colony worlds. At various times, exchange programs have brought in Kzinti and Gorn (and even Klingon and Romulan) students, although

most of these stay for only a few months or a year.

The course is demanding, as students must not only earn a full four-year bachelor's degree, they must also take courses in military operations and leadership. Most students earn degrees in engineering, but about a quarter of the class earn other degrees, including pre-medicine, pre-law, economics, business management, chemistry, and physics.

Both naval and Marine officers graduate from the academy, and a given cadet need not select which branch of the service he plans to enter until the start of his third year. All cadets spend three months between their third and fourth academic years as a junior officer on a starship or with a Marine unit.

The military courses are intense, but cadets need not learn everything up to starship command during this period. The course is primarily one of a familiarity with military subjects and leadership at the lowest officer levels. Officers will return to the academy several times during their careers for more advanced training to qualify for higher ranks.

Cadets are selected from the best of the Federation's youth by a rigorous process of testing. Each member planet and colonial province is assigned a number of "slots" at the Academy, and nominates qualified youth to fill them. Because only half of cadets actually graduate from the demanding course, each planet usually has several slots to fill every year. Each member of Star Fleet or the Marines who is awarded a Gold Star for valor may send one of his children to the academy above and beyond the "slots" allocated to planets. Star Fleet itself can send a number of outstanding enlisted personnel to the Academy each year.

Some cadets are older than one would expect of a college freshman (equivalent to an Earth-human of 18 years), although the maximum age for entry is the human equivalent of 24 years old. Some candidates do not apply (or win appointments) on their first opportunity, and may have completed a year or more of college education at civilian schools. Many cadets enter the Academy with a year or two of college courses already complete, and have an easier time of it as they do not have to spend as many hours studying.

Many planets have "Academy preparation courses" of one or two years that prepare possible nominees for the entrance exams. Depending on what help the candidate requires, this could include physical or military training, or academic work, or a combination of the above.

Graduates of the University wear "class rings" signifying this fact. People can become officers without attending Star Fleet Academy, but without "the ring" their careers are limited.

Graduate Degrees: Some graduates of the University go on to take master's and even doctorate degrees in academic subjects (engineering, management, chemistry, physics). Some do this immediately upon graduation and before active service; others are selected for this later in their careers. Most officers who earn graduate degrees do so by distance learning, often from civilian schools.

Advanced Leadership School: After an officer earns his commission and spends about three years in the fleet, he will attend the Advanced Leadership School. This is required for promotion to O-3 (senior lieutenant, Marine captain). About half of officers do this via distance learning while on their ships; most of the rest take an intense two-month course on a starbase. A handful actually return to Star Fleet Academy for a longer three-month version of this course. (These are often the officers with the greatest likelihood of attaining high rank in the future.) The courses for Marine and Navy personnel are different. Foreigners who attend the Academy as exchange students are more likely to be serving officers who take this (or more advanced) courses rather than undergraduates taking cadet training.

Staff School: This course is required for promotion to the O-4 rank (lieutenant commander, Marine major). It focuses on management, staff work, operational planning, and logistics. It is considered the equivalent of a master's degree. In peacetime, most officers leave the service as O-3 senior lieutenants and, if they take this course at all, do so as reservists through distance learning. Those officers who "go career" will take most of this class by distance learning, but all will attend a resident session of several months duration at a starbase. A hundred a year are selected to take the full six-month resident class at Star Fleet Academy itself. The courses for Marine and Navy personnel are different, but each gets some familiarity with how the other branch operates.

Command School: This course is required for promotion to O-5 rank and for command of a warship. Half of all O-4s leave the service without being promoted to O-5; some of those will take the course through the reserve system. (Some O-4s will command frigates in peacetime, but only after graduating from Command School.) The course requires extensive distance learning and then a two-month resident program at a starbase. About 40 people attend the full six-month resident class at Star Fleet Academy itself. Graduates wear a special ring (replacing their University ring). There is no specific course for promotion to O-6. The courses for Marine and Navy personnel are different, but each gets several courses dealing with how the other branch operates.

War College: Required for promotion to admiral or general, this is a six-month resident course taught only at Star Fleet Academy. It is considered the equivalent of a doctorate, and includes the equivalent of two years of classroom studies completed by distance learning over several years prior to attending the course itself. The naval and Marine officers attend the same classes.

Medical School: While most doctors in Star Fleet come from civilian universities, Star Fleet has its own very prestigious medical school focusing on the broader range of skills needed for a starship doctor. Some cadets who graduate from the University with pre-med degrees go directly to the Star Fleet Medical School and the associated teaching hospital; others come to the Medical School after obtaining pre-med degrees from civilian schools. (Those must attend a brief orientation course to learn about the

military.) Part of this school is at Star Fleet Academy in San Francisco, but there are branches on every starbase. Medical officers in Star Fleet often spend time at the starbase hospitals between ship assignments, gaining new skills and knowledge through the intense training available there.

Star Fleet Bureaus

A series of bureaus provide Star Fleet with non-combat support services. These are detailed below. Star Fleet Intelligence is discussed under the section on Federation intelligence agencies.

Bureau of Construction: This bureau is responsible for the construction of bases of all types all over the Federation, from the mighty starbase to the smallest planetary defense base. For the most part, the officers here supervise civilian contractors.

Bureau of History: The smallest of the bureaus, this office is responsible to continually write and update the history of Star Fleet. It is primarily staffed by older semi-retired officers and by civilian academics. Some of these personnel research older chapters of history. This bureau actually makes a profit, as it has a booming business in publishing histories that are popular with civilians.

Bureau of Logistics: The largest of the bureaus, this is Star Fleet's supply arm. The Bureau of Logistics buys (or manufactures) everything Star Fleet needs (except starships and bases), arranges to store it until Star Fleet needs it, and then ships it to the unit that needs it. The Bureau of Logistics schedules shipments, but the convoys are organized and operated by the numbered fleets. This bureau includes its own lawyers to handle contracts with vendors.

Bureau of Medicine: This bureau operates the fleet hospitals. It is responsible for recruiting, training, and assigning doctors and for conducting medical research. This bureau is commanded by the Surgeon General, who holds the rank of a Colonel-General (O-10) or Fleet Admiral.

Bureau of National Guards: Discussed in detail in the National Guard section, this bureau is responsible to coordinate, support, and inspect the various planetary National Guard formations and ships. It is this bureau that decides what retired Star Fleet ships will go to each planet (although politicians often pressure the bureau to get better ships assigned to their planets).

Bureau of Navigation: This bureau is responsible for compiling survey data, issuing and updating maps of space and planets, and marking the Federation's borders.

Bureau of Operations: This office plans overall operations, training, and strategy at the highest levels. Basically, this office runs any wars that Star Fleet has to fight within overall policy established by the civilian leaders.

Bureau of Personnel: This office is responsible for recruiting, training, and assigning all Star Fleet and Star Fleet Marine personnel. It is also responsible for keeping track of their pay, promotions, awards, and other service records.

This office also handles public affairs, chaplains, mail, burials of the deceased, prisoners of war, etc.

There is a sub-bureau responsible for training and keeping track of reservists and recalling them to the military when needed.

Bureau of Propulsion: Originally formed to develop functional warp engines, this bureau is Star Fleet's primary research arm. It studies, researches, and explores every imaginable area of science and engineering, not just new kinds of engines. It was the Bureau of Propulsion that developed X-technology. The Bureau of Propulsion never investigates medical matters as this might lead to biological weapons, which are prohibited by Federation law.

Bureau of Ships: This bureau designs and supervises the construction of all of Star Fleet's ships. (In the case of auxiliaries, it supervises the conversion of suitable merchant ship hulls to military uses.) A sub-bureau designs and builds the Federation Star Fleet's fighter-shuttles.

Bureau of Veterans' Affairs: This office coordinates the pensions and medical treatment of retired military personnel. It has a separate budget for this, as voted by the Federation Council.

Judge Advocate General Bureau: This bureau comprises Star Fleet's military justice system. In any military organization, misdemeanors are handled by unit leaders and minor felonies are handled by line officers temporarily assigned to courts-martial. Major felonies, however, are handled by professional JAG lawyers and military trial judges. The JAG Bureau includes its own investigators and forensic labs. The JAG Bureau includes the equivalent of Federation marshals who can execute arrest warrants against military personnel and transport prisoners before and during their trials. The JAG Bureau also administers the military prisons holding members of the military who violated military regulations.

Inspector General: The "IG" conducts investigations separate from JAG regarding "systemic problems" within the military, such as a commander abusing his authority or a purchasing officer embezzling government funds.

Star Fleet Reserves

Like all military systems, Star Fleet has a peacetime mission of training more personnel (especially officers) than it needs. The surplus officers are discharged to the reserves and seek civilian careers, often on colony worlds or civilian space vessels. Others join their home planet's National Guard, where they may or may not be on active duty full time. Using an "up or out" system, Star Fleet officers of any given rank who do not achieve promotion to the next rank in a specified period of time are sent to the reserves. Many of these officers continue their military educations while on reserve status (via distance learning) and achieve promotions. Even in peacetime, some reservists are recalled to active duty if they have special skills or show particularly outstanding abilities.

Some officers come into Star Fleet as reservists, usually through the National Guard systems of their home planets. Those who have a military inclination but who did not gain entry into Star Fleet often enter their planet's National Guard forces. Every year, hundreds of the brighter National Guard officers are selected by Star Fleet for active duty tours of one-to-three years. They are considered reserve officers on active duty during these periods. The theory is that Star Fleet's rigorous selection process may have overlooked promising candidates, and that those who have demonstrated superior abilities in the National Guards deserve a chance to prove their worth in Star Fleet. About a third of these achieve the honor of transfer to Star Fleet itself; the balance return to National Guard units (where they take with them their experiences, improving the National Guard).

During wartime, Star Fleet rapidly expands, first by returning the "mothball" fleet to active service, then by new production. (During the General War, unprecedented numbers of new ships were built, easily quadrupling Star Fleet's size despite combat losses.) The theory is that returning reservists will quickly provide the crews for the mothball fleets, as well as additional personnel for existing ships. More returning reservists will go into the first of new production ships. By the time the pool of reservists runs out, Star Fleet will have been able to expand its regular training facilities and produce the required number of officers and other personnel.

Star Fleet Auxiliary

Most Star Fleet officers are classified as being members of "the unrestricted line," meaning that they can hold most jobs on a starship (including captain) as their rank and experience qualifies them.

Certain jobs, however, require specialized skills not normally found in purely military officers. These include doctors, lawyers, scientists, and (during the General War) engineers and logisticians. (This last category includes the endless administrative officers such as personnel, maintenance, supply, and so forth. Most of those jobs are held by line officers during peacetime, providing Star Fleet with yet another means of rapid expansion. Line officers in logistics jobs can be sent to starships while civilians with suitable experience can take over non-combat duties.)

These are the auxiliary officers. (The Klingons would call them "technical warrant officers." Either service treats them with respect but as "second class" officers.) Most auxiliary officers enter Star Fleet from civilian schools for the relevant skills. Star Fleet has programs to give scholarships to students at such schools, who agree to serve a few years as auxiliary officers in exchange for the cost of their education. These achieve their auxiliary commissions after a brief orientation course lasting a few months. They have the pay and privileges of officers, but cannot "command" things outside of their own departments, and thus could never command starships (except in the most exigent of circumstances).

Some auxiliary officers, by working hard on extra training, are able to obtain "line" commissions later in their careers, but this gets more difficult as they become more senior. Some auxiliary commanders (O-4, O-5) are given line commissions as lieutenants (O-2, O-3), while others kept working on the requirements for their entire careers and were able to directly qualify for regular commissions at the same rank.

Warrant Officers

"Warranted" (as opposed to "commissioned") officers are not commonly seen in Star Fleet. In the general sense, "warranted" means "authorized to act as an officer" while "commissioned" means "granted the power to function as an officer."

Prior to the General War, the only time "warrant officers" were seen was in rare cases (two or three times a year) that a civilian had to be given a temporary military rank for some specific purpose. Warrants are issued for a specific purpose and a limited time whereas commissions are lifetime appointments (at least until retirement or court-martial).

During the General War, more and more "warrant officers" appeared. These warrants were usually appointed "for the duration of the war" and were given to civilians who had a skill the military needed. This was mostly for the convenience of Star Fleet; a "warrant" could be issued "at the stroke of a pen" while "earning an auxiliary commission" took considerably more effort, training, and approvals. Most warrant officers during this period were applicants or selectees for auxiliary commissions, but Star Fleet could not wait for the paperwork to be completed and needed these people on duty at once. Most of them received "auxiliary commissions" within a few months, and some of those later earned "line commissions."

STAR FLEET MARINES

Marines are, in the basic sense, infantry (or other ground troops) assigned to naval ships. They conduct landing operations, form boarding parties, and provide on-board security. Every Star Fleet warship, from the small frigates to huge dreadnoughts, has a contingent of Marines. During wartime, the size of these contingents was often increased, and specialized Marines (combat engineers, commandos, and others) were added.

Larger Marine combat units were rare in peacetime, but did exist. During the General War, large units were created, although most large ground forces units during that conflict were National Guard formations taken into Federation service.

Marine officers have careers similar to naval officers, being Academy graduates (or reserve officers on active duty) who take additional courses in leadership, management, and command at various points in their careers. Unlike the Klingons, Federation Marine and naval officers are separate services with distinct training. Marines regard themselves as warriors; naval personnel generally do not. Naval personnel do not normally serve with the Marines, but might be attached to Marine units in some cases. Marine battalion and larger headquarters include one or more naval officers as a liaison.

Marine Organizations: The lowest Marine unit is a squad of five troops, which includes a team sergeant, a corporal, and three privates. Of these, one Marine has a small rocket launcher, one has a repeating phaser, and the other three have phaser rifles.

Larger units are combinations of squads. Normally (in a pure ground unit, not those regularly assigned to a starship) there is a regular fixed organization. Units assigned to starships often (almost always) break this pattern and include however many Marines the naval architects decided to make space for. Many starship captains add more Marines (causing overcrowded barracks) during wartime or for special missions.

In some cases, large units (companies or battalions) are created as temporary formations using whatever Marines are on the starships in the area. Command cruisers, heavy battlecruisers, and dreadnoughts have a senior Marine officer on board to take charge of such formations if needed. Otherwise, these Marine officers are simply another officer on the commodore's staff or admiral's staff, providing their specialized knowledge for planning operations, and exercising a general coordination function for all of the Marines in the squadron or fleet. (Four-star fleet admirals usually have a two-star Marine major general on their staff. Wartime theater commanders usually have a three-star Marine lieutenant general to coordinate all of the Marine units in the Fleet.)

A Marine platoon has three squads, plus a leadership element (a lieutenant, a senior sergeant, a medic, a communications specialist, and a technician) that effectively forms another squad. Platoons on ships might include as few as two squads or as many as five, plus the leadership squad. In some cases, one of the squads might be a specialist type (heavy weapons, commando, combat engineer).

A Marine company includes three platoons, plus a weapons squad and a leadership element: a total of about 55 people. Units on ships might have two or more platoons, and the weapons unit might be more than one squad. Engineers and commandos might be attached.

A Marine battalion normally has three companies, plus a special weapons company that includes platoons of commandos, heavy weapons, and engineers. With leadership and support elements, this totals about 250 people. (In practice, most battalions are temporary and could have two-to-five companies plus whatever special platoons are available.)

A Marine brigade (with a thousand Marines) is a temporary grouping of battalions and separate companies. Marine divisions exist only as administrative functions; if an entire division of ground troops is needed, this comes from the National Guard.

Frigates have a reinforced Marine platoon of about 30 troops. Pre-war destroyers have the same unit, but the wartime class of "war destroyers" have an official unit of 40 Marines and often carried 60 or more. Light cruisers normally carry the same 40-man unit (often expanded to 60) while heavy cruisers carry 50 and dreadnoughts about 70. Star Fleet ships carry fewer Marines than comparable Klingon ships.

Marines assigned to starships are classified as belonging to the Fleet Marine Forces. A given Marine may go back and forth from assignments to the Fleet Marine Force and regular Marine units many times during his career.

There are four regular Marine Divisions in Star Fleet, each commanded by a two-star major general and each including four regiments (of 1,000 Marines each). The First Division is assigned to the Sixth Fleet on the Romulan border (detaching a regiment to the Seventh Fleet). The Second Division is assigned to the Capital Area and provides regiments on the Kzinti border, Gorn border, and in the Second Fleet's exploration zone. The Third Division is assigned to the Third Fleet on the Klingon border. In peacetime, these divisions rarely operate as complete units, but simply provide companies, battalions, and regiments for

whatever missions are assigned. The Fourth Division trains recruits, runs the Marine Corps' schools and hospitals, and provides extra platoons and companies for special or temporary assignments.

During the General War, the number of Marines greatly expanded, reaching a total force of over 100,000 troops. Most were on starships, but a quarter of these formed a total of 24 "regular" regiments including 18 regiments of infantry, three regiments of armored cavalry or tanks, and three of combat engineers. Few of the regiments (and none of the armored or engineer regiments) fought as a complete unit. There were very few operations in which more than a brigade of Marines (which, with attachments, could reach 1,500 personnel) were employed. There simply were not enough Marines, and most of the large ground units came from the National Guard.

During the General War, six National Guard brigades (from Earth, Mars, Vulcan, and Andor) and 19 National Guard battalions were designed as "spaceborne" units and functioned as Marines, being used interchangeably with Marine units.

Special Forces: These are Marine units (but include some naval personnel) formed for elite combat assignments, often behind enemy lines and without the support of other units. Nominally, Marines who transfer to the special forces are part of special forces battalions. (There were six of these during peacetime; by the end of the General War this had expanded to 36 battalions grouped into four brigades. Each battalion, however, had only about 100 "operators" and 20-30 support personnel.) Most of the time, special forces operate in teams of five, 10, or 15 personnel. In most cases, these are attached to larger Marine units for special missions, and every "regular" Marine battalion includes a platoon of 10 or 20 special forces Marines. Unlike Prime Teams, commandos are purely combat forces.

PRIME TEAMS

The Prime Teams are the elite of Star Fleet. Most are nominally naval personnel, but about 20% of the total Prime Team force are Marines and a few are civilians with "warrants" for military duty.

A Prime Team consists of about six people, and is a combination of a commando team, hostage rescue team, gang of spies, diplomatic negotiating team, hostage rescue force, and scientific exploration team.

Members of Prime Teams are multi-tasking people with a wide variety of skills. The emphasis is on teams and every team has the required skills in the person of one or more of their members. All Prime Team personnel are qualified to the same level as Marine special forces operators, but Prime Teams are Star Fleet units, not part of the Marines (even if some Marines are members of Prime Teams).

Most Prime Teams are assigned to key starships (heavy cruisers and larger units), although some are assigned to numbered fleets and other headquarters. In some cases, the starship will leave its Prime Team (perhaps with other personnel) on one planet to solve a problem there, while the ship goes to solve some other problem in some other location.

The Galactic Intelligence Agency operates some units which are functionally identical to Prime Teams (and more that are functionally identical to special forces) but uses these for its own purposes.

All of Star Fleet's Prime Teams are trained (as individuals and then as teams) at Prime Central, located on Luna (near Earth).

THE NATIONAL GUARD

Each planet in the Federation (from member planets down to colonies, but not proscribed or uncontacted planets, and not all probationary planets) has its own military reserve units known as the National Guard. (This is a translation of a term in Federation Standard which has no direct translation into English as it includes one word derived from Vulcan and one from Andorian. The full term could loosely be translated as "collective security forces from each political unit which prepare together to protect the Federation at large in time of crisis.")

Member planets and associate planets form their own National Guard forces with their own resources and under their own control. Sponsored planets have National Guard units formed and controlled by the sponsoring planet. Franchised and Federation colony planets have National Guard units organized by the Star Fleet Bureau of National Guards using local personnel and funding. In some cases, the Federation will "borrow" National Guard units from member planets to provide local security for Federation-chartered or franchised colonies (with the Federation paying for the cost).

All planets pay for their own National Guard forces, but they do receive some training from the Star Fleet Bureau of National Guards and their forces are expected to attain standards and follow a common doctrine, all set by the Star Fleet Bureau of National Guards. Star Fleet and the Star Fleet Marines often pass surplus or older equipment to National Guard units, and send officers and senior NCOs on training and inspection visits. Tens of thousands of retired or former Federation military personnel join National Guard units, and the active-duty Federation military provides training for National Guard units.

In many cases, an entire star system will be treated as a single colonial administration for purposes of its National Guard. Some systems include several colonies (often of different types) and these multi-colony systems often (but not always) combine their National Guard units into a single command structure.

The National Guard of each planet includes three branches: ground troops (of various types), planetary defenses, and starships.

Ground Troops: These are the most numerous of National Guard forces, although most of these personnel are part-time reservists who train a few weeks each year. While their primary purpose would be to defend the planet from a major ground invasion, such invasions are rare (simply because nobody can bring enough troops to defeat the indigenous forces of a major industrial planet). Another

function of such divisions of ground troops is that they can be moved to planets likely to be attacked to prevent an invasion (or sent to recently captured enemy planets to make a counter-invasion impractical). Ground troops also have missions of disaster relief and the prevention of civil disorder. Relatively few ground troops are on active duty at any given time as it costs money to pay troops and in peacetime, most have nothing to do. This, unfortunately, means that troops called up during a crisis are not as highly trained as the Star Fleet Marines who remain on active duty. Many of the ground troops on active duty are on worlds near the border (or in the Neutral Zone) which are likely to experience some enemy commando raids in the immediate future.

National Guard units, for the most part, have more people than the equivalent Marine units. A Marine squad has five people; a National Guard squad may have nine. A Marine battalion might have 200 people; a National Guard battalion might have 700 or more. National Guard units include more "support" personnel since they draw their supplies from ground supply routes, rather than having supplies transported down from a starship.

Some National Guard ground troops are organized and trained for use as Marines. These "spaceborne" units are smaller but have a higher state of training than other National Guard units. Their function is to be used during periods of major fleet expansions (including the reactivation of mothballed ships and the rapid construction of new ships). Some National Guard brigades are configured as "assault" units to be loaded on troop transports and used to capture defended ground targets such as enemy colony planets. These units have different equipment designed to be more "portable" in a strategic sense.

Planetary Guards: Another organization should be mentioned, that being the Planetary Guard. These units, an element of the National Guard structure, are auxiliary police (lightly armed or unarmed) whose function is to supplement police forces during emergencies, natural disasters, or major events (e.g., traffic control for the annual sports finals). Most are unpaid and do only a few hours of training and a day of service per month. Legally, they cannot be sent off planet, but they are not trained for "combat" operations in any case. Some of them did fight as infantry during invasions of their planets by the Klingons or Romulans, but as they had little training and few weapons, this was largely an ineffective waste of life and time. Even so, a handful of these "militia" units (those led by veterans) did serve effectively against enemy invaders.

Planetary Defenses: These include ground-based weapons, planetary-defense fighters, and some orbital bases. These involve smaller numbers of personnel but more of them are on active duty, and they train more often. While a ground-forces battalion might have two or three soldiers (out of 500) on paid active duty (to answer the phone, update paperwork, and maintain the equipment stockpiles), a planetary-defense battalion could easily have 100 of its 300 personnel on active duty at any given time. For most planets, these personnel handle system traffic control as they are already operating and observing spatial scanners anyway.

The fighters and bombers used for local defense on most Federation planets, as well as a few skiffs and auxiliary ships, are the primary defense force able to influence events in the entire system. For political and production reasons, the National Guard uses different fighters than Star Fleet. The standard National Guard fighter is the F-16, renowned for its Gatling phaser (and its minimal drone load). That phaser is hard to maintain and has a brief service life, making it impractical for naval forces but perfect for the rarely engaged National Guard units. (Actually, most F-16s did not have Gatling phasers, but those most likely to see combat did.) A few planets use other types of fighters, such as the locally built Cygnan designs or Shenyang-7s (modified shuttles). Only a few of the richest member planets had the rare, advanced, and incredibly expensive F-15s.

Federation member planets have warships as part of their National Guards, but these are almost always refitted Early Years and Middle Years designs "passed along" by Star Fleet. In general terms, each of the major member planets and each regional government has one cruiser. Associate member planets and provincial governments have one destroyer. Some particularly wealthy planets maintain more than one ship. In some cases, these ships are deployed away from their home planet on special missions to increase fleet presence or security in key regions. Most of these ships will make a cruise every other year to some other planet, perhaps to a distant colony world sponsored by the planet owning the ship. During wartime, these ships are important for local defense and rear-area security (e.g., guarding convoys against raiders or pirates) but they are too old and slow to join regular fleet units except during absolute emergencies.

Many member worlds and some colonies have auxiliary cruisers (freighters modified for use as warships) and these are crewed by the National Guards. Some of the planetary-defense monitors are crewed by National Guard units (when defending colonies owned by member planets). Most monitors are Star Fleet units assigned to key colonies as needed.

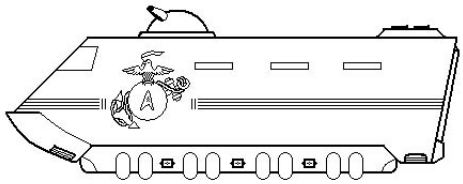
FEDERATION ARMORED VEHICLES

While there are numerous types of these, we will provide data on two representative samples: the M190 tank and the M3 ground combat vehicle.

M3 Ground Combat Vehicle: This is the standard armored personnel carrier used by National Guard units (and the Marines, when so equipped). Its purpose is to transport ground troops into a combat zone and support them. The crew (driver and gunner) are at the front, entering through a top hatch, while up to six ground troops are in a separate rear compartment. While other GCVs exist with wheels or tracks, the M3 has a counter-gravity drive system. The vehicle is powered by a fusion reactor between the crew and passenger compartment. While the vehicle "floats" on its counter-gravity drive, twin thruster units provide a speed of up to 65 mph when cruising five feet or so above all but the roughest terrain. At lower speeds (up to

Veh	ST/HP	Hnd/SR	HT	MOVE	LWt	LOAD	SM	OCC	DR	LOC
M3	130	-2/4	11	5/65	20	2	+5/+2	2+6 S	150/70	t
M190	150	-3/4	11	2/25	30	1	+5/+2	3S	600/175	t2X

20 mph), the M3 can move in any direction without turning. It can pitch and yaw up to 15°. Maneuverability is exceptional. It can cruise over the tops of trees (at no more than 20 mph) and can cross terrain gaps up to 65 feet when moving at speed. The vehicle can cross any type of terrain, including open water and swamps.



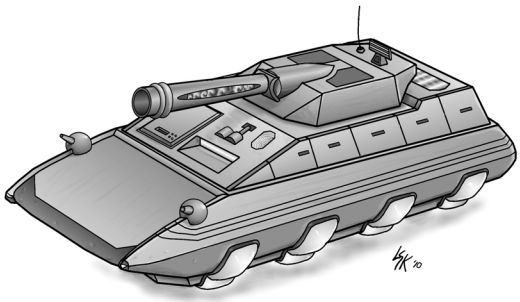
The vehicle is armored against any hand weapon or conventional munition, including anything built during the 20th century short of a nuclear weapon or 200mm cannon shell, but can be penetrated by heavy plasma and kinetic weapons. If needed, extra armor plates can be added, which slow the vehicle by 20%, increasing DR by 25/15. (Two layers of armor would slow the vehicle below 50% of its normal speed, leave only limited rough terrain performance, and increase DR by a total of 50/30.)

The M3 mounts a crew-served repeating phaser in a 360° turret. The M3 is 20 feet long and eight feet high, and weighs 21.4 tons. Cost is $4.4 million.

M190 Tank: This is the standard heavy assault vehicle used by National Guard units. (The Marines have such vehicles but rarely use them due to the nature of their missions.) The crew of three ride in the hull, operating the turret remotely. While the M190 "floats" on its counter-gravity drive, twin thruster units provide a speed of up to 25 mph when cruising a five feet or so above all but the roughest terrain. At lower speeds (up to 6 mph), the M190 can move in any direction without turning. It can pitch and yaw up to 10°. Maneuverability is limited by the weight of the vehicle, but it can float over gaps as large as 35 feet when moving at speed. The vehicle can cross any type of terrain, including open water, sand, and swamps.

The vehicle is armored against all but a direct hit by the heaviest of weapons, but could be damaged by multiple hits from infantry rocket launchers.

The M190 mounts two crew-served repeating phasers in the hull and a heavy electro-cannon in its 360° turret.



The M190 is 26 feet long and nine feet high, and weighs 28.4 tons. Cost is $27.8 million.

SENSORS: Both have PESA:15-mile range; see ***GURPS Ultra Tech*** p. 61.

AESA: BioSigns 150 yds, Physical Objects 700 yds; see ***GURPS Ultra Tech*** p. 65.

WEAPONS: Both have crew-served repeating phasers in the hull. The M3 has one; the M190 has two.

Dam	Acc	Range	RoF	Shots
Spec	12	800	8	na

Disintegrate levels 1-3 are dDam 4d(3), 6d(3) and 8d(3) respectively. No armor divisor when target is not another vehicle.

M190 has a heavy electro-cannon in the 360° turret.

Dam	Acc	Range	RoF	Shots
6d x20 cr ex [8d]	11	500/2000	1	1(100)

Notes: 1,4 on Heavy Weapons Table, ***GPD*** p. 284. See ***GPD*** p. 222 for explosive damage.

COMMUNICATIONS: Both, radio with 30-mile range; command version has secondary radio with 500-mile range.

COMPUTER: Crew each have Stations handling IFF, [+2 to Navigate (land/sea)], fire control, flight recorder, computer, fire suppression, and IFF gear.

THE FEDERATION POLICE

The term "police" has numerous meanings, causing no end of confusion. We can, for the moment, divide these into the "civil police" (who enforce laws on each planet) and the "space police" who enforce laws in space.

Civil Police: Each member planet, associate member planet, or non-member independent planet (with a native population or otherwise large enough to be considered "independent"), has its own local government with its own civil police force. These police organizations are created by each planet for their own purposes, and all of them are organized differently based on local requirements or traditions. Most of these planets also have their own space police, operating skiffs and larger police ships for their own enforcement and security needs.

Federation and franchised colony planets (those not sponsored or controlled by a single other planet) have one of two forms of civil police coverage. Most smaller colonies have Federation police appointed by the district or provincial government (and billed to each colony's account), although they may also appoint (and pay) their own full-time or part-time constables for certain functions. Once a colony reaches a population of more than 1 million, it may, but is not required to, form and fund its own police force (with assistance from and under the overall standards of the Federation Department of Justice). Many of the franchised colonies set up by industrial corporations have their own security-guard forces who function as local police,

minimizing (but not eliminating) the need for Federation police.

Sponsored colonies have police forces organized and controlled by the sponsoring planet.

The Federation Marshal's Service (see p. 39) is a branch of the Federation (space) police, not a part of any planetary police force. Its function is to execute arrest warrants on member and colony planets on order by a Federation judge. This is done only when the individual is suspected of an interplanetary crime (such as smuggling), has fled another jurisdiction which has an active arrest warrant for him, or has committed a crime against the Federation itself such as treason, counterfeiting, or espionage. Federation Marshals are also responsible for running Federation prisons and transporting Federation prisoners.

Some colonies are so small (less than a thousand people) that they do not have a full-time police presence and make do with constables (part-time peace officers appointed by the local government) and an occasional visiting policeman from the district government. Some research stations are so small (with a dozen or fewer people present) that the station chief is automatically designated as a reserve constable able to enforce the law as needed.

Space Police: The organization properly termed Federation Police is the "space police." Its function is very similar to the U.S. Coast Guard in the 20th century: providing border patrols, customs & tariff enforcement, and search & rescue services. It operates the police corvettes known to players of ***Star Fleet Battles,*** as well as the police flagships, police carriers, police skiffs, and other police craft. As a general rule of thumb, there are police skiffs based at all planets with significant populations and space traffic, a police corvette within each district (map hex), and a police flagship (along with an extra corvette or two) for each province. The regional (and central) government will also have extra police ships which can be sent to any part of the region (or Federation) where they are needed. Each member planet may have its own police flagship and several police corvettes, and those provinces and districts near the core region usually have more police ships due to the larger number of colony planets and commercial traffic.

It may seem that this horde of police ships would be a powerful addition to Star Fleet during a time of war, but in point of fact, relatively few of these ships served with the military during the General War. They spent most of their time during the War performing their original duties, rescuing small isolated colonies and outposts, and (most important of all) shepherding freighters and other civilian ships out of the way of the Klingon and Romulan invasions.

During the General War, the Federation Police fielded larger ships (up to frigates) and small "carriers" (based on police cutter hulls) with fighter-shuttles to provide increased firepower for local defense against raiders and pirates. Nominally, each province had one such ship, but some provinces never got them as they could not be built fast enough. By the time of the Andromedan War, every province had a police carrier, a police flagship, and six or more police cutters, and there were more police ships in mobile forces to respond to any problem.

PRIVATE SECURITY COMPANIES

The Federation is a free-market economy, and any citizen or group of citizens can start a (legal) business doing whatever they think will make a profit. One type of such business, that had existed from time before the Federation, was security contracting, providing protection and other armed services for local governments, private corporations, universities, non-governmental organizations, and even the Federation itself.

The largest and most diverse of these was Black Nebula, which was founded in Y120 and had grown to a size of over 25,000 armed employees (and 5,000 other employees) by the start of the General War. By the end of the General War, Black Nebula had passed 1 million total employees, and it only grew larger during the subsequent ISC intervention and the Andromedan War.

Private security companies had existed from the birth of the Federation, but grew rapidly after the Y102 border declaration. This border included thousands of potentially valuable planets no one had ever seen. Corporations and planetary govenments chartered small ships and sent them looking for new planets and new resources. Corporations could not own planets, but they could survey several planets in a given area, find resources of interest, then ask the Federation to give them a franchise for an area of a planet commensurate with the size of a colony that the corporation could afford to build. All of this colonial expansion created a steady market for private security companies, and dozens of them were founded during this period. These contractors hired adventurous people (often ex-military) and went looking for suitable planets. Once the planet was colonized, the owning corporation might hire its own police or security force, or it could simply contract with a security company.

Growing colonies had infrastructure worth protecting. Anywhere there are people, there is crime, as those less fortunate (or simply less principled) found it easier to break into a warehouse than hold down an honest job. Orion Pirates (and other interplanetary criminals) also found these warehouses to be choice targets for clandestine burglary or even brute-force robbery. It was simpler in most cases for the colonial government to hire a contractor to supply armed security guards (who usually came along with no end of technological surveillance and security systems).

By Y140, many security corporations were offering to provide and operate defense satellites for colony worlds. Rochester Armored Delivery was created in Y134 to provide armed starships (APTs and FTs) specifically to move small, high-value cargoes (gold, gems, dilithium) from remote colonies to better controlled colonies where regular shipping methods were available. Black Nebula followed suit, and the *Black Swan* (one of their armored courier ships) was present at the colony of Shiloh in Y144 when an Orion Light Raider tried to make off with an outgoing shipment of dilithium and iridium. Supported by the defense satellites (also operated by Black Nebula), the *Black Swan* was able to drive away the raider. (A Federation police ship arrived a day later, too late to do anything but conduct an investigation and try to track the Orion ship.)

Overnight, this turned into a growth opportunity for the largest security contractors. They diverted some of their armed transports and small survey ships to local planetary security and anti-piracy patrol, bought more ships for quick conversion into armed security vessels, and in time were building their own heavily armed variants of the Priority Transport, small freighter, and Free Trader specifically for the planetary-defense mission. This did not always turn out well, as some of these ships turned into "corporate thugs" and a few turned into pirates.

By the time the General War started, the total number of non-military armed "combat" ships in service with all security companies was well beyond 600. As the General War dragged on, all contractors together had nearly 2,000 of them. Most of these never went far from the planet they were assigned (or specifically built) to protect.

At the start of the General War, Star Fleet was recruiting heavily from security companies (mostly by recalling reserve and retired personnel to duty). One Star Fleet admiral remarked that the increased production of warships and activation of mothballed ships would not have been possible without the returning personnel from these contractors, followed by thousands of experienced spaceship personnel who had been trained by the security contractors and could meet the higher military standards. By the time this supply was exhausted, Star Fleet had been able to expand its own training schools to keep up with the wartime production of ships. Many security companies had to set up their own training schools to teach "civilians off the street" to be the crews of armed space vessels.

FEDERATION INTELLIGENCE AGENCIES

All empires operate various intelligence agencies in order to protect their interests, and the Federation is no exception. It operates three intelligence agencies: the Galactic Intelligence Agency, Police Counter-Intelligence Division, and Star Fleet Intelligence. The Police Enforcement Division conducts some operations of an intelligence nature, but primarily against criminals.

Galactic Intelligence Agency: The Galactic Intelligence Agency is the Federation's foreign intelligence service. Forbidden to spy on Federation citizens or to conduct covert operations on Federation worlds, GIA "officers" operate on foreign planets where they hire local "agents" with access to information that the Federation wants. Entire office buildings full of GIA "analysts" (on Federation planets) then process this information. In peacetime, the GIA operates "legally" from embassies, contacting local citizens, businessmen, government officials, and military officers seeking information. Most "secret agents" are paid by the GIA for the information they provide, but a few do so out of revenge or in a bid to free their own planets from the tyranny of oppressive empires. In wartime, GIA officers go underground and continue to "run their agents" and send reports back to the Federation.

Federation Police: The Federation Police is the primary law-enforcement arm of the Federation, and is comprised of several branches, most of which are detailed above, but two could be considered as "intelligence agencies" and are listed here.

The Counter-Intelligence Division is responsible for catching foreign spies. This division has the closest relations to the GIA. In some cases GIA officers participate (with special permission) as part of joint task forces inside the Federation, but these officers are prohibited from intelligence gathering and are there only to provide information and interrogate spies that have been arrested. (Those arrested on charges of espionage who are Federation citizens cannot be interrogated by GIA officers.)

The Enforcement Division does just that: it enforces the laws and conducts "undercover" operations to penetrate criminal enterprises that span multiple star systems. This branch is often given special permission to conduct limited foreign operations that relate directly to smuggling cases, and some of these "ears on the ground" networks were used for military-intelligence purposes during wartime. There are several long-standing bureaus inside this division dedicated to specific types of crime, such as counterfeiting, racketeering, extortion, and homicide. Smaller task forces are set up as needed to deal with major criminal operations in limited areas.

Star Fleet Intelligence: Star Fleet Intelligence is (at least in theory) a completely passive organization, analyzing information from the Galactic Intelligence Agency, open sources, battle reports, and eavesdropping on foreign (or enemy) communications. Indeed, Star Fleet Intelligence operates all electronic long-range collection systems, such as listening posts on the Klingon border with "big ears" able to detect Klingon communications.

Star Fleet Intelligence is nominally forbidden to operate its own "officers" behind enemy lines or to hire foreign "agents" inside enemy organizations; these tasks are supposedly left to the GIA. In practice, Star Fleet Intelligence personnel on embassy duty are always looking for sources inside the enemy (or allied) military and "run these agents" despite GIA protests. This was excused on the theory that these were "professional contacts" who voluntarily offered information, not "agents" who were assigned to get it.

During the General War, Star Fleet Intelligence began doing more of these "illegal" activities, running agents on enemy planets. The GIA protested and the government looked the other way. Star Fleet Intelligence refused to "hand over" these agents to the GIA out of fear that the GIA would not focus on things the military wanted to know and might consider these Star Fleet agents to be expendable in seeking GIA priorities.

Other Intelligence Agencies: There are other groups or agencies in the Federation with minor roles that touch on intelligence matters. Many corporations and planetary governments have their own counter-intelligence operations as a self-defense measure. In some cases (such as Cygnus) corporations and planetary governments conduct full-scale intelligence, sabotage, and other operations. The Federation diplomatic corps has its own intelligence gathering and analysis section, which serves its own needs during peacetime and continues to function in wartime.

Federation Weapons

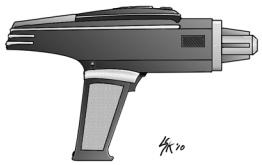
The ubiquitous phasers have been the primary small arms for Star Fleet and the Federation Marines since Y70, when they replaced older weapons. Under the Federation Defense Act of Y113, planets joining the Federation are required to adopt standardized phaser weapons as primary combat weapons for National Guard forces. Before Y113, each member species equipped its National Guard forces with weapons derived from its own technology and history. This resulted in logistical nightmares during wartime and made tactical coordination between ground troops from different planets difficult.

The standard phasers used by Federation personnel are the Phaser-I, Phaser-II, Phaser Rifle, Pulse Phaser, and Repeating Phaser. These are described in ***GURPS Prime Directive Core Rulebook.*** Other common weapons include:

Phaser Carbine

A shortened version of the standard phaser rifle, the phaser carbine is lighter and easier to use in close quarters, but is less accurate than the phaser rifle. It is commonly used by soldiers who are not infantry, but who might still find themselves in a fighting situation, such as a headquarters section or artillery personnel. Marines often use the carbine in boarding actions, and it is a favorite weapon of Orion Pirates and mercenaries. It takes two C power cells to operate.

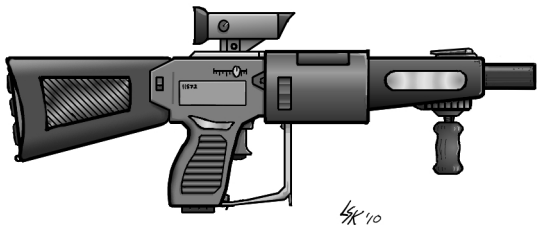
Phaser-IIA Assault Pistol



This is an upgraded version of the standard Phaser-II pistol, featuring better accuracy and an improved power consumption curve. It first saw service with Prime Teams and Star Fleet Marine Special Forces (commando) units in Y175. In Y179 it officially replaced the Phaser-II as the general issue pistol for Marines and for those Star Fleet personnel who regularly see personal combat. Many Federation Police and National Guard units used the older pistol until the end of the General War, but had access to phaser assault pistols in limited numbers. Larger than a pistol, earlier generations might regard it as a submachinegun. An interim design, it has one B cell (100 shots) that is hard to replace and one C cell (130 shots) that is easily replaced.

Grenade Launcher

This weapon used by Marines and National Guard troops is different than the models used by the Klingons and Romulans. The Federation version has a smaller magazine, holding nine grenades, but is lighter, more ergonomic, more power-efficient, and more accurate than enemy weapons. The grenades can be of mixed types. One grenade is fired each turn, and a loaded magazine weighs four pounds. Individual grenades can be fired if the magazine is empty or unavailable. It takes one turn to load a single grenade. It takes one D power cell.



The Fralli Pole-Whip

The weapon is a small staff and a 2-yard whip that conducts the Fralli's bio-electric charge as well as entangles people as does the Terran whip. Only a Fralli can properly use the pole-whip's capacity to pass on a charge. Non-Fralli can use this weapon and cause normal whip effects.

FRALLI POLE-WHIP (DX-5, Kusari-3, Monowire Whip-3, or Whip-3)

TL	Weapon	Damage	Reach	Parry	Cost	Wt	ST	Notes
4	Fralli Pole-Whip	sw-2 (0.5) cr or thr-1 cr	2	–2U	$60	4	7	

BEAM WEAPONS (PISTOL) (DX-4, other Beam Weapons-4, or Guns (Pistols)-4)

TL	Weapon	Damage	Acc	Range	Wt	RoF	Charges	ST	Bulk	Rcl	Cost	LC
10	Phaser-I	Spec	2	50/100	Neg	1	100(2)	4	-1	1	$2,000	1
10	Phaser-II	Spec	5	200/500	1	3	100(2)	4	-2	1	$3,000	1
10	Phaser-IIA	Spec	5	250/600	2	4	230(3)	4	-2	1	$3,800	1
10	Phaser-III	Spec	5	250/600	2	4	100+130	4	-2	1	$3,800	1

BEAM WEAPONS (RIFLE) (DX-4, other Beam Weapons-4, or Guns (Rifles)-4)

TL	Weapon	Damage	Acc	Range	Wt	RoF	Charges	ST	Bulk	Rcl	Cost	LC
10	Phaser Rifle	Spec	8	500/1,000	4	5	100(3)	5	-6	1	$4,500	1
10	Phaser Carbine	Spec	7	350/700	3	4	100(3)	4	-4	1	$3,600	1
11	Pulse Phaser	Spec	10	800/1,200	4	5	100(2)	5	-6	1	$5,500	1
11	Rpting Phaser	Spec	12	600/800	8	8	500(2)	7	-8	1	$7,500	1

GUNS (GRENADE LAUNCHER) (DX-4 or most other Guns-4)

TL	Weapon	Damage	Acc	Range	Wt	RoF	Charges	ST	Bulk	Rcl	Cost	LC
10	Grenade Launcher	Grenade	8	–/1,150	5.5	1	54	6	-3	1	$4,800	1

FEDERATION STARSHIPS

TYPES AND CLASSES

The ships of the Federation's Star Fleet are remarkably uniform in their designs. Most consist of a saucer section with from one to four engine nacelles. Only two types use other designs: the "old" light cruiser and police cutter.

The Federation intended to "standardize" the fleet using 45 gigawatt (GW) warp engines. The cruiser (CA) had two, the dreadnought (DN) three, the destroyer (DD) one, and the (unbuilt) battleship (BB) would have had four.

The exceptions were the frigate (FF), which used a pair of smaller 18 GW warp engines, and the "old" light cruiser (CL), which had a pair of 36 GW engines. (There were also a few "fast" heavy cruisers which used 54 GW engines, but production of this type was short-lived.)

The destroyer and cruiser used nearly the same saucer, while the dreadnought used a slightly larger version.

The pre-war ships reflected the idea that Star Fleet spent as much time (or more) doing surveys as it did fighting a foreign invasion. Ships had extensive laboratory facilities and a mix of combat and non-combat systems. Federation ships carried fewer Marines than Klingon ships, as they were not expected to put down frequent rebellions.

During the General War, new designs were forced on Star Fleet by the need to build more ships more quickly.

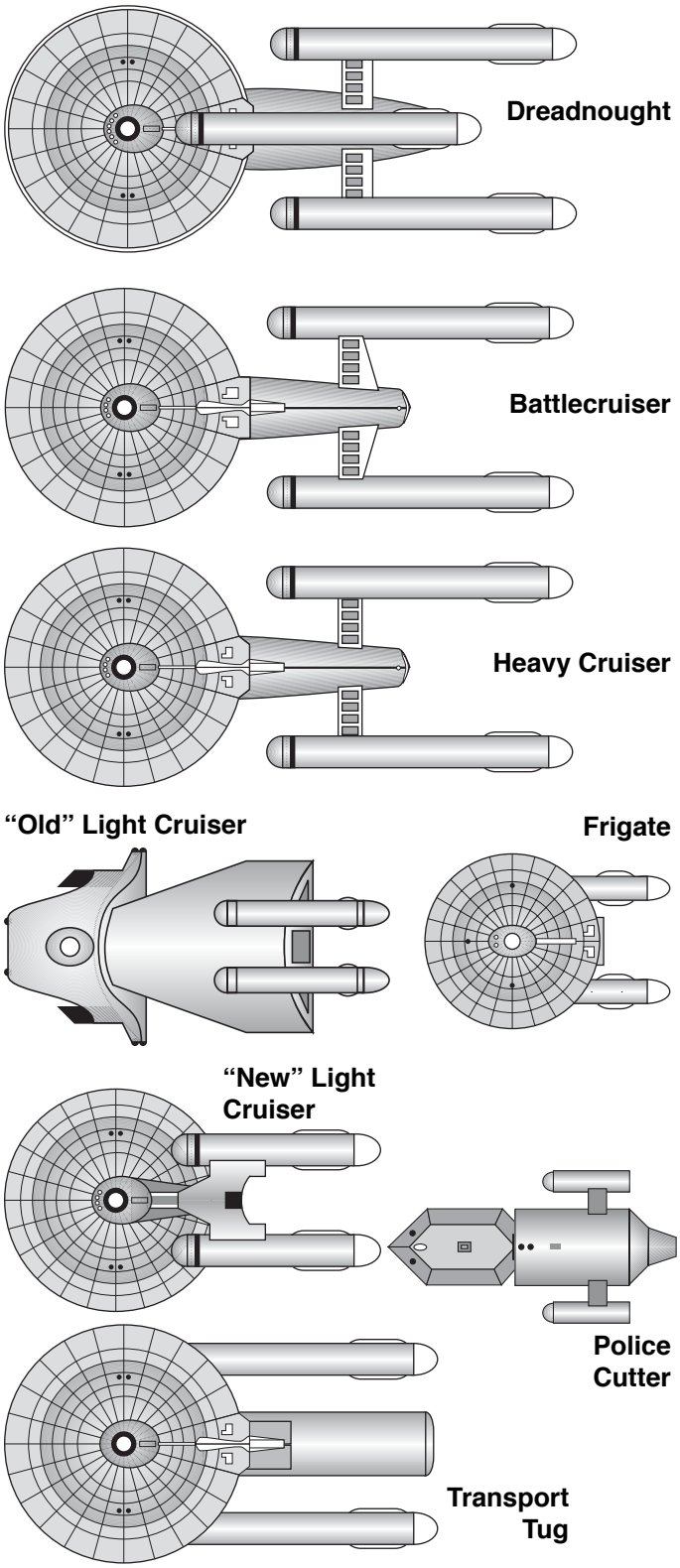
The first of the new designs was the "new" light cruiser (NCL) known as the *Kearsarge* class. This was, basically, the cruiser/destroyer saucer, with two smaller (36 GW) warp engines and no rear hull. It was based on a previously rejected design to improve the underpowered destroyer. The 36 GW engines were a new "hot" design very different from the old 36 GW engines on the "old" light cruiser.

The second new class was the "new" destroyer (generally known as the "war" destroyer or DW), which used three of the frigate's 18 GW engines. (This design won a competition against an enlarged "battle frigate" which also used three of these 18 GW engines.)

The third of the new classes as the "new" heavy cruiser, which used two of the NCL's 36 GW engines and one of the frigate's 18 GW engines.

All ships are TL12. All of the ships (except the destroyer) are listed with the refits they received just prior to the General War. For the most part, these refits added two defensive phaser-3s and one missile rack. This was primarily a response to new (faster and more dangerous) drone missiles being used by the Klingons (and by the Kzintis, with whom the Federation had a very tenuous alliance before the General War began).

A list of ship names is at http://www.starfleetgames.com/documents/Fed_NCC_Numbers.pdf



HEAVY UNITS

Star Fleet operates several classes of very large starships. These are used as fleet flagships, primarily during wartime.

DREADNOUGHT

The *Federation*-class dreadnoughts were the original flagships at the start of the General War. The ships were continually improved, from the DN (with four photons) to the DN+ (with six) to the DNG (which gained more systems and is detailed below).

Data: three 45 GW warp engines, 18 GW impulse drive, reactors (24 GW total), batteries (18 GW total), six photon torpedoes, 12 phaser-1s, two phaser-3s, four missile racks, five transporters, four tractor beams, six shuttlecraft, crew 540, Marines 80.

LIGHT DREADNOUGHTS

A class of four light dreadnoughts were built before the General War, theoretically to raid behind enemy lines during any invasion. These were known as the "splendid cats" and included the *Star Cougar, Star Tiger, Star Leopard,* and *Star Lion. Star Lynx* was a half-sister.

Data: three 45 GW warp engines, 15 GW impulse drive, reactors (21 GW total), batteries (15 GW total), five photon torpedoes, 10 phaser-1s, two phaser-3s, three missile racks, four transporters, four tractor beams, six shuttlecraft, crew 480, Marines 80.

HEAVY CARRIERS

The large carriers of the *Napoleon* class operated powerful groups of fighter shuttles.

Data: three 45 GW warp engines, 12 GW impulse drive, reactors (15 GW total), batteries (15 GW total), four photon torpedoes, six phaser-1s, four phaser-Gs, four missile racks, four transporters, five tractor beams, six shuttlecraft, 12 F-14 fighters, 12 A-10 assault fighters, crew 490, Marines 50.

HEAVY DREADNOUGHTS

Entering service in the late years of the General War, these ships were slightly larger than the original dreadnoughts, having increased firepower and staying power.

Data: three 45 GW warp engines, 18 GW impulse drive, reactors (30 GW total), batteries (24 GW total), six photon torpedoes, 14 phaser-1s, three phaser-3s, six missile racks, five transporters, four tractor beams, six shuttlecraft, crew 540, Marines 80.

HEAVY BATTLECRUISERS

These were not dreadnoughts, but very large cruisers built late in the General War as less expensive supplements to the dreadnoughts. They often served as division and even fleet flagships.

Data: two 45 GW warp engines plus a 6 GW warp pack in the saucer, 12 GW impulse drive, reactors (15 GW total), batteries (21 GW total), four photon torpedoes, two extra weapons (see below), 10 phaser-1s, two phaser-3s, two missile racks, four transporters, two tractor beams, six shuttlecraft, crew 500, Marines 80.

There were four very similar sub-classes.

Kirov: This class had two extra drone racks and was designed to fight on the Klingon Front, where such weapons were commonly used.

Bismarck: This class mounted two light plasma-F torpedoes supplied by the Gorns, and was designed for the Romulan Front.

New Jersey: Built very late in the General War, this class had a total of six photons (as many as a dreadnought) and was designed to destroy the Klingon and Romulan border defenses, opening the way to a general offensive.

Shangri-la: Built very late in the General War, these step-sisters were "battle carriers" with fighters in addition to their heavy battlecruiser firepower, and formed the core of new strike-carrier groups.

Data for battle carrier: two 45 GW warp engines plus a 6 GW warp pack in the saucer, 12 GW impulse drive, reactors (15 GW total), batteries (21 GW total), four photon torpedoes, 10 phaser-1s, two phaser-3s, four missile racks, four transporters, three tractor beams, three shuttlecraft, 12 F-14 fighters, crew 500, Marines 80.

BATTLESHIPS

The Federation considered construction of massive *Mars*-class battleships to match the Klingon B10, which they knew was under construction. The design was controversial, and many felt that the high cost was not justified. Construction was never begun, not least because the Klingon B10s did not enter service until after the General War ended.

Data: four 45 GW warp engines, 18 GW impulse drive, reactors (36 GW total), batteries (36 GW total), 10 photon torpedoes, 15 phaser-1s, three phaser-Gs, nine missile racks, eight transporters, five tractor beams, 12 shuttlecraft (half of which might have been replaced by fighters), crew 820, Marines 130.

HEAVY CRUISERS

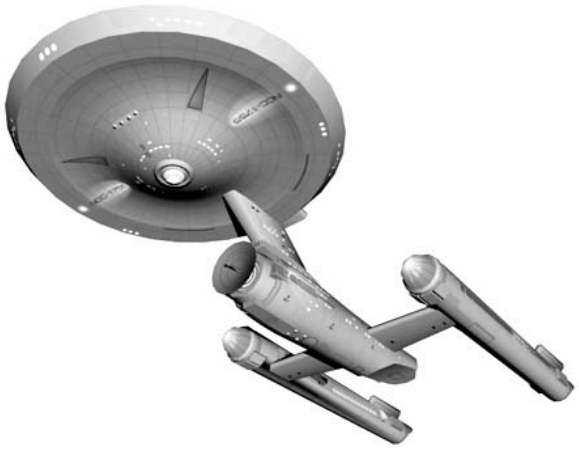
The workhorse of Star Fleet was the heavy cruiser of the *Constitution* class. These patrolled the borders during peacetime, and were key elements of wartime fleets.

CONSTITUTION CLASS

The original 24 ships of this class were the pride of the pre-war Star Fleet.

Data: two 45 GW warp engines, 12 GW impulse drive, reactors (6 GW total), batteries (12 GW total), four photon torpedoes, eight phaser-1s, two phaser-3s, one missile rack, three transporters, two tractor beams, four shuttlecraft, crew 430, Marines 50.

There were some minor variations. The *Agincourt* was damaged in combat and was repaired (due to a lack of photons) with seven drone racks (no photon torpedoes), and two special sensors, and was used as a bombardment platform.



COMMAND CRUISERS

These were slightly larger than heavy cruisers, adding a flag bridge and improving some of the phaser firing arcs. They were used by squadron commanders.

HEAVY COMMAND CRUISERS

Appearing in the middle of the General War, these ships had two more phaser-1s, an extra missile rack, a fourth transporter; the battery system was 15 GW. A small center warp pack (6 GW) was added, and they had the flag bridge of the original command cruiser.

R-CLASS HEAVY CRUISERS

These ships were actually of the class before the *Constitutions* and included such famous ships as the *Republic, Ramilles,* and *Reshadije.* They were built decades before the General War, but were refitted and supposedly brought up to the standards of the *Constitutions* (their data is effectively the same) but being older, they were harder to maintain and regarded as slightly inferior. They were consigned to the (boneyard of the) Sixth Fleet. Few were built before the *Constitutions* became the "final" design for the new heavy cruiser, and the "R's" were refitted rather than replaced to save money.

STRIKE CRUISERS

These were designed to be less expensive than heavy cruisers at a mimimal loss in performance. The design was disappointing, and the small number built were sent to the boneyard of the Sixth Fleet.

Data same as heavy cruiser except: two missile racks, four transporters, crew 400, Marines 50. The laboratory facilities were only half of those on a heavy cruiser.

STRIKE CARRIERS

Bearing no relationship to the strike cruisers, these were fully capable heavy cruisers which also carried a squadron of 12 F-18 naval fighter shuttles.

Data: two 45 GW warp engines, 12 GW impulse drive, no reactors, batteries (12 GW total), four photon torpedoes, six phaser-1s, two phaser-3s, two missile racks, two transporters, four tractor beams, four shuttlecraft, 12 F-18 fighters, crew 460, Marines 50.

The similar battle carriers had been converted from ships built to a slightly different standard; their larger shuttle bays could accomodate 12 of the larger F-15 fighters used by the National Guard. These ships were the core of carrier groups, and the F-15 pilots claimed to be the elite of the carrier force.

GALACTIC SURVEY CRUISERS

Superfically similar to heavy cruisers, these ships had reduced armament, but carried powerful sensors along with supplies for extended voyages.

Data: two 45 GW warp engines, 12 GW impulse drive, reactors (6 GW total), batteries (18 GW total), two photon torpedoes, four phaser-1s, four phaser-3s, three missile racks, four special sensors, seven transporters, two tractor beams, eight shuttlecraft, crew 450, Marines 60.

X-CRUISERS

Built late in the General War, these were the largest ships able to use the new "X" technology systems. (That technology could not be installed on larger ships due to warp field dynamics.) These ships were easily as powerful as pre-war dreadnoughts.

Data: two 60 GW warp engines, one 6 GW warp engine in the saucer, 12 GW impulse drive, reactors (6 GW total), batteries (45 GW total), four fast-loading photon torpedoes, 12 phaser-1s, no phaser-3s, two missile racks, three transporters, two tractor beams, four shuttlecraft, crew 500, Marines 80.

FAST CRUISERS

These ships were designed and built before the General War as fast raiders. They had larger warp engines, but could only mount two photon torpedoes. They partially made up for the lost firepower with two extra phaser-1s. The design was expensive and only a few were built.

Data: two 54 GW warp engines, 12 GW impulse drive, reactors (6 GW total), batteries (12 GW total), two photon torpedoes, 10 phaser-1s, two phaser-3s, one missile rack, three transporters, two tractor beams, four shuttlecraft, crew 430, Marines 50.

NEW LIGHT CRUISERS

The most numerous of Star Fleet's cruisers during the General War, the ships of the *Kearsarge* class had 90% of the firepower of a heavy cruiser but cost only 62% as much to build. These "new light cruisers" or NCLs were the equivalent of the Klingon D5, Romulan SparrowHawk, Kzinti medium cruiser, and Gorn heavy destroyer. Any empire other than the Federation would have called them war cruisers.

Data: two 36 GW warp engines, 12 GW impulse drive, reactors (12 GW total), batteries (6 GW total), four photon torpedoes, six phaser-1s, two phaser-3s, one missile rack, two transporters, two tractor beams, four shuttlecraft, crew 360, Marines 40.

As with the "war cruisers" of other empires, this class came in almost endless variants, including scouts, carriers, commando ships, transports, and other types.

Light Command Cruiser (CLC): Intended as a squadron flagship, this ship was slightly large than the NCL, with another 3 GW battery system, two more phaser-1s, and a second missile rack. It also added a transporter and a flag bridge. Crew was 400, Marines 60.

New Drone Cruiser (NCD): This design replaced the four photon torpedoes with five missile racks. The reactors were converted to missile storage.

New Escort Cruiser (NEC): Used as part of carrier groups, this ship had no photon torpedoes, mounting only two phaser-1s and four phaser-Gs. There were five missile racks. The reactors were replaced by cargo storage. Crew was increased to 380.

New Aegis Cruiser (NAC): To improve the firepower of carrier groups, the NECs were eventually replaced by NACs, which had two photon torpedoes, two phaser-1s, four phaser-Gs, and three missile racks.

New Commando Cruiser: There were no reactors, missile racks, or photon torpedoes. There were four transporters instead of only two, and a total of eight shuttles. Crew 400, Marines 160.

New Minesweeping Cruiser (NMS): The four photon torpedoes were replaced by mine racks (four mines per rack). Crew 300.

New Light Carrier (NVL): Carrying 12 F-18 fighters and two shuttlecraft on a smaller hull, this type supplemented CVS-class ships in the fleet. There were no photon torpedoes, weapons being limited to the original phasers and missile rack. Crew was 420.

New Strike Carrier (NVS): An improved design over the NVL, this type retained two photons, the same phasers, and had a pair of missile racks. It carried 12 F-18 fighters and four shuttlecraft. Crew was 420. It lost 3 GW of reactor power compared to the NVL and NCL.

Light Tactical Transport (LTT): This ship was a "mini tug" able to carry one pod (of the types used by the tug). There were no photons; the reactor was 6 GW. There were four phaser-1s (instead of six). Crew 300, Marines 30.

New Scout Cruiser (NSC): This ship used four special sensors to scan for enemy units and provide electronic warfare support. (There were no photons.) Crew 320.

New Heavy Fighter Carrier (NVH): This ship was the Federation answer to a gunboat tender. As the Federation did not use gunboats, this had six very large F-111 fighters on external linkages (they would not fit inside). The data is the same as an NCL except: only two photon torpedoes, no missile racks, two special sensors, six total tractor beams, two shuttlecraft. Crew 380.

Advanced Destroyer (DDX): Based on a hull similar to the destroyer and the NCL, this ship used X-technology. These ships had to be built from the keel up and could not be converted from existing DDs or NCLs.

Data: two 36 GW warp engines, 12 GW impulse drive, reactors (12 GW total), batteries (27 GW total), four fast-loading photon torpedoes, nine phaser-1s, no phaser-3s, two missile racks, two transporters, two tractor beams, two shuttlecraft, crew 300, Marines 60.

NEW HEAVY CRUISERS

To offset combat losses, the Federation designed a new heavy cruiser (NCA) type based on the *Kearsarge* class. This was done by adding more hull structure below the saucer, and a third (smaller) warp engine.

Data: two 36 GW warp engines, one 18 GW warp engine, 12 GW impulse drive, reactors (12 GW total), batteries (12 GW total), four photon torpedoes, eight phaser-1s, two phaser-3s, two missile racks, two transporters, two tractor beams, four shuttlecraft, crew 400, Marines 50.

There were variants of this class, listed below. The data is the same as an NCA except as noted.

New Command Crusier (NCC): Battery increased to 15 GW; flag bridge added; total of 10 phaser-1s and three transporters.

New Attack Carrier (NCV): Reactors only 9 GW; has 12 F-18 fighters. Crew 460.

New Fast Cruiser (NCF): *Manta Ray* was built as a fast raider to replace the lost CF *Stingray*. It had three 36 GW warp engines, only two photon torpedoes, 10 phaser-1s and no phaser-3s.

New Heavy Drone Cruiser (NDC): Replaced four photons with four missile racks (total six); all reactors were replaced with missile storage.

New Survey Cruiser (NSR): There were no reactors, and only two photon torpedoes. There were, however, eight shuttles and four transporters. There were only six phaser-1s and no phaser-3s, but there were two special sensors. The crew was 420 and there were 60 Marines.

New Plasma Cruiser (NAL): This design replaced two photon torpedoes with two plasma-F launchers bought from the Gorns. The idea was that if a few ships had this weapon, fleet commander could "mix up" their tactics and confuse their enemies.

New Heavy Fighter Carrier (NHV): A heavier version of the F-111 fighter carrier, this ship had only 9 GW of reactor power, but it has six tractor beams (to carry six F-111 fighters) and two special sensors. There were only two photon torpedoes and only two shuttlecraft. Crew 420.

New Heavy Scout Cruiser (NHS): A more survivable platform for electronic warfare support, this design replaced four photon torpedoes with eight special sensors. There were only four phaser-1s. Crew 360.

OLD LIGHT CRUISERS

When Star Fleet selected the *Republic* class as their new-generation heavy cruiser, the staggering cost of a total fleet replacement horrified the Federation Council. To save money, dozens of ships of the earlier *Texas* class were refitted with then-modern technology and kept in service. (The design of the *Texas* dated from the sublight period, and some of the ships were originally built without tactical warp capability.) By the time of the General War, Star Fleet still had many of these ships in service. (They were about 75% as effective as a *Constellation* and had already been paid for.) Many more were in the moth-balled squadrons of the Eighth Fleet.

Data: two 36 GW warp engines, 12 GW impulse drive, reactors (6 GW total), batteries (12 GW total), two photon torpedoes, six phaser-1s, two phaser-3s, one missile rack, two transporters, two tractor beams, two shuttlecraft, crew 370, Marines 40. There were old-style armor systems backing up the shields.

Many of these ships were converted into support variants, including the types below. Data for the variants is the same as above except as noted.

Hospital Ship (CLH): A uniquely Federation design, these were converted from light cruisers. There are no photons, phaser-1s, or reactors. There are six phaser-3s one missile rack, and six shuttles. Crew 400, Marines 20.

Escort (ECL): Built before the General War, this design was not particularly effective. There were no photon torpedoes and only two phaser-1s, but there were two phaser-Gs and four missile racks. Crew 400, Marines 30.

Commando Cruiser (CMC): Star Fleet built a few of these for major troop landings. They had no photon torpedoes and no reactors. The battery system is only 6 GW. There are four transporters and six shuttles. Crew 410, Marines 160.

Minesweeper (MS): There are no photon torpedoes, the battery system is only 6 GW, and there are only four phaser-1s. There are two missile racks, six mine racks, and four tractor beams. Crew 300, Marines 30.

Large Scout (LSC): When it was built in Y130, this was the most powerful electronic warfare ship in space. There are no photon torpedoes and only two phaser-1s. There are six special sensors.

Survey Ship (CLS): This design was used until the improved Galactic Survey Cruiser became available. There were no photons and only four phaser-1s; there were four special sensors and six shuttles. Crew 350.

OLD HEAVY CRUISERS

When Star Fleet selected the *Republic* class as their new heavy cruiser, they rejected an enlarged design based on the "old" light cruiser after two prototypes were built.

Data: two 45 GW warp engines, 12 GW impulse drive, reactors (6 GW total), batteries (12 GW total), four photon torpedoes, eight phaser-1s, two transporters, two tractor beams, four shuttlecraft, crew 460, Marines 60. Two phaser-3s and a missile rack were not part of the original design but would have been added by the General War had this class been selected for production.

DESTROYERS

These ships were a fallout from the huge cost of the *Republics* and *Constitutions.* Using more or less the same saucer and one of the cruiser's two engines, they could be produced more cheaply than a separate class.

The original type, built in Y130, was known simply as "the *Saladin*-class destroyer" and had two photon torpedoes. Later historians took to referring to it as the DDM in an effort to distinguish it from later improved designs. There was space for two more photon torpedoes (since the saucer was based on the heavy cruiser, which had four) but the ship lacked the power to effectively use them.

Data (DDM): one 45 GW warp engine, 12 GW impulse drive, reactors (12 GW total), batteries (6 GW total), two photon torpedoes, six phaser-1s, two transporters, two tractor beams, two shuttlecraft, crew 200, Marines 30.

Improved Destroyer (DD): By Y150, Star Fleet was seeking ways to improve the fleet with its limited budget. One solution was to add the two "missing" photon torpedoes. This gave the ships tremendous firepower for such a small design, but the ships were disappointing in combat as they lacked the power to arm the third and fourth photon. They were effective in attacking slow targets and bases, and in theory would have been used in that role.

Refitted Destroyer (DD+): At the dawn of the General War, Star Fleet refitted its destroyers (DD, DDL, SC, and DDG), adding two defensive phaser-3s and converting surplus lab space into 12 GW of reactor power.

Guided Weapons Destroyer (DDG): This design, produced just before the General War, was considered the best of the destroyer designs. It added missile racks (in the space for the "missing" photons) while retaining the original two photon torpedoes. As drones did not require power, this gave the ship more combat ability without overburdening its engine.

Destroyer Leader (DDL): This design used the space for the two "missing" photons to install two plasma-F launchers (obtained from the Gorns). Since these weapons could be armed weeks before a battle and kept ready at virtually no cost, they provided improved firepower while not overloading the engine (at least not in the initial exchange). Plasma-Fs, at short range, did more damage than even overloaded photons. Not many ships of this type were built. The original theory was to use them on the Romulan Border (the Romulans and Gorns used plasma torpedoes) but they ended up serving everywhere.

Destroyer Escort (DE): This design was used for pre-war carrier groups. It had no reactors and only two phaser-1s. It had two photon torpedoes, four missile racks, four shuttles, and four phaser-Gs. Crew 220, Marines 20.

Scout (SC): Part of the original pre-war class design, this ship used eight powerful "special sensors" (there were no photon torpedoes) to locate distant enemy squadrons and for electronic warfare. There were only two phaser-1s. Crew 190.

Fast Destroyer (DDF): Using the larger 54 GW engine of the fast cruiser, this ship was designed as a fast raider, but proved too small to be effective. It had two photon torpedoes, six phaser-1s, and no phaser-3s.

WAR DESTROYERS

The pre-war destroyer class never functioned as well as it should have, and the excellent frigate class became more and more obsolescent as the General War dragged on. Star Fleet commissioned a new design which was known simply as the *Ortega*-class destroyer, but which the ***Star Fleet Universe*** categorizes as the war destroyer.

Data: three 18 GW warp engines, 9 GW impulse drive, reactors (6 GW total), batteries (6 GW total), three photon torpedoes, four phaser-1s, two phaser-3s, one missile rack, two transporters, two tractor beams, three shuttlecraft, crew 200, Marines 40.

As with the "new" light cruiser, this class was used for no end of special mission variants.

War Destroyer Escort (DWE): Used as a carrier escort, this ship replaced DEs and FFEs. There were no reactors. Replace all three photon torpedoes with missile racks. Replace the two phaser-3s with two phaser-Gs.

War Drone Destroyer (DWD): This ship replaces the three photon torpedoes with three missile racks. The idea was that if the fleet as a whole had a few ships able to deploy more missiles, the admiral would have the ability to adjust his tactics against a variety of enemies.

War Destroyer Scout (DWS): This ship has three special sensors (replacing the photon torpedoes).

War Destroyer Transport (DWT): Designed for utility duties and quick resupply, this design had no photon torpedoes, only two phaser-1s, no reactors, and only one missile rack. All of the removed systems were converted to cargo storage space.

War Destroyer Minesweeper (DWM): This ship had no photon torpedoes or reactors, but it had four mine racks and an extra tractor beam.

Command War Destroyer (DWC): Designed as a squadron leader, this ship had an enlarged reactor (9 GW) and a second missile rack. The two phaser-3s of the DW were replaced by phaser-1s on this leader variant. Crew 220, Marines 50.

Commando War Destroyer (CDW): This ship was designed to provide a fleet commander with a battalion of Marines he could use to assault enemy bases or planets. There were no photon torpedoes, reactors, or missile racks; those were removed to make room for Marines and their equipment. There were two extra shuttles and a third transporter. Crew 380, Marines 140.

Mobile Carrier (DWV): Designed to provide convoy escorts and patrol groups a limited fighter capability, this ship had only two photon torpedoes, but it did carry eight F-18 fighters. Crew 250.

Fast Resupply Ship (FCF): While most carriers made do quite well with frigate-based resupply ships, the large size of the F-111 fighters required a larger hull, so a DW variant was created for the mission. There were no photons, only two phaser-1s, and no reactors. All of the liberated space went into cargo volume. The ships were sometimes used for other priority cargo runs, but DWTs were preferred for such routine missions. Marines 15.

Advanced Technology War Destroyer (DWX): The advent of X-technology drove Star Fleet to build a variety of ships that used it. While the DWX was smaller than the CX or DDX, it could be built in larger numbers.

Data: three 24 GW warp engines, 9 GW impulse drive, reactors (6 GW total), batteries (27 GW total), three fast-loading photon torpedoes, eight phaser-1s, no phaser-3s, two missile racks, two transporters, two tractor beams, three shuttlecraft, crew 250, Marines 60.

HEAVY WAR DESTROYERS

The heavy war destroyer was an enlarged DW, and was effectively a light cruiser. What set HDWs apart, however, was their ability to be reconfigured (at a starbase) for a variety of missions.

Data: four 18 GW warp engines, 9 GW impulse drive, reactors (6 GW total), batteries (6 GW total), three photon torpedoes, four phaser-1s, two phaser-3s, one missile rack, two transporters, two tractor beams, four shuttlecraft, crew 300, Marines 40.

In addition to the above, the "bay" could be configured with a variety of systems for various missions.

Combat configuration adds 12 GW of reactor power, two rear-firing weapons (phasers, photon torpedoes, or missile racks), and other non-weapon/non-power systems.

Carrier configuration can include up to 12 F-18s.

Commando configuration adds four shuttles and can add up to 300 Marines.

BATTLE FRIGATE

As the frigate became less and less effective, Star Fleet launched a design competition to find an improved replacement. The winner was the DW, but the FFB (battle frigate) was an effective design and a few were built.

Data: three 18 GW warp engines, 9 GW impulse drive, reactors (3 GW total), batteries (6 GW total), three photon torpedoes, four phaser-1s, two phaser-3s, one missile rack, two transporters, two tractor beams, two shuttlecraft, crew 180, Marines 30.

Despite the small production run, there were several variants of the battle frigate.

Battle Frigate Carrier (FBV): This ship carries six F-18s and three shuttlecraft, but has no reactors or photon torpedoes. It has two missile racks instead of only one.

Battle Frigate Scout (FBS): This small scout was suitable to warn a fleet of an approaching enemy, but was rather small to survive in a battle as an electronic warfare platform. The three photon torpedoes were replaced by three special sensors.

Battle Frigate Escort (FBE): Designed to replace the FFE in carrier groups, this design varied from the standard FFB having no reactors, only one photon, and a total of three missile racks. It replaced the two phaser-3s with Gatling phasers.

Drone Battle Frigate (FBD): All three photon torpedoes were replaced by missile racks. Perhaps the most effective of all FFB variants, this gave a fleet commander the ability to put a lot of missiles into the battle in a short time.

FRIGATES

The *Burke*-class frigates were probably the best frigate design in the galaxy, and were produced by Star Fleet in vast numbers.

Data: two 18 GW warp engines, 9 GW impulse drive, reactors (3 GW total), batteries (6 GW total), two photon torpedoes, three phaser-1s, two phaser-3s, one missile rack, two transporters, two tractor beams, two shuttlecraft, crew 160, Marines 30.

This class was used for numerous special mission variants, including:

Escort Carrier (FFV): Designed before anyone realized that fighters needed to be in larger squadrons to be effective, this ship carried only six F-18s. It was used to provide replacements to larger carriers, as a convoy escort, and to screen the flanks for larger fleets. It had no photon torpedoes and only two phaser-1s. Crew 200; Marines 20.

Escort Frigate (FFE): Used as part of carrier groups, it had no photons (they were replaced by missile racks), and the phaser-3s were upgraded to Gatling phasers.

Commando Frigate (CFF): Designed to provide a fleet commander with a substantial landing force, this design had no photon torpedoes, no reactor, and only two phaser-1s. It had a third transporter, but only one tractor beam. It had four shuttles. Crew 280, Marines 160.

Scout Frigate (FFS): Used to provide warnings of approaching enemy ships or to help squadrons close in on moving targets. The two photon torpedoes were replaced by special sensors.

Plasma-Armed Frigate (FFL): This design replaced the photon torpedoes with Gorn-supplied plasma-F launchers. Knowing that there were some of these weapons in Star Fleet complicated the tactical situation for the Klingons and Romulans.

Drone Frigate (FFD): This design replaced the two photon torpedoes with missile racks, increasing the number of missiles that the squadron or fleet could launch at one time. As the Klingons used drone-missiles, the FFD was often forced into a defensive role, sending its missiles to intercept Klingon missiles.

Minesweeping Frigate (FFM): Designed to remove mines laid by enemy forces (and lay a few mines of its own as needed), this design replaced the two photon torpedoes with mine racks. Like all minesweepers, it had the targeting software, reinforced front shield, and special shuttlecraft needed to deal with enemy mines.

Frigate Transport (FFT): Used for priority cargo runs by a larger fleet, this ship had extensive cargo facilities, but had no photon torpedoes, no reactors, and only two phaser-1s. This ship could (with difficulty) move tug pods but it could not operate them, and was used to redeploy them so tugs and LTTs could link up with them. Crew 120; Marines 10.

Fast Resupply Ship (FCR): This was a special version on the frigate transport (no photons) designed to support carrier groups. It had the Aegis software of a carrier escort, and its cargo holds were configured to transport spare F-18 fighters for carrier groups.

Police Flagship (FLG): All empires built similar designs, usually based on frigate hulls. A police flagship was used to control the police forces in an entire province. It included a variety of special equipment (minesweeping, special sensors, repair systems, additional Marines) so that the police commandant would have a wide variety of special assets at his immediate disposal.

Data: two 18 GW warp engines, 9 GW impulse drive, no reactors, batteries (6 GW total), no photon torpedoes, one special sensor, three phaser-1s, two phaser-3s, one missile rack, two transporters, two tractor beams, seven shuttlecraft, crew 260, Marines 130.

Advanced Technology Frigate (FFX): The smallest Star Fleet ship built to use the new technology of the late General War, it was controversial. The technology was expensive, and smaller ships were vulnerable to quick destruction in fleet battles. Being very fast, it was useful for independent patrols in high-risk areas.

Data: two 24 GW warp engines, 9 GW impulse drive, reactors (3 GW total), batteries (27 GW total), two fast-loading photon torpedoes, five phaser-1s, no phaser-3s, two missile racks, two transporters, two tractor beams, two shuttlecraft, crew 240, Marines 50.

TRANSPORT TUG

First appearing in Y135, the *Ptolemy*-class Fleet Transport (known by everyone as "the tug") used the engines of the heavy cruiser and a similar saucer. It was armed only for self-defense with two phaser-1s on each side. The purpose of the ship was to carry one or two 130x660 foot cargo pods. This was the same "pod" used by the civilian freighters. A ship (tug or freighter) could drop a loaded pod at one spaceport (which could then take days to unload the pod while the expensive ship went elsewhere with a pod that the spaceport had loaded earlier). The tugs were built (each costing the fleet a heavy cruiser in terms of budget and production space) because they were far faster than freighters and could be used for emergency resupply of the fleet, and for delivering pre-packaged relief supplies to the site of natural disasters. They were also needed to speed up construction of new bases.

The concept of pods quickly expanded. Special pods were produced for no end of military missions, including battle pods (with photon torpedoes and phasers), carrier pods (which could operate fighters), fighter resupply pods (taking fighters to carriers to replace combat losses), repair pods, and scout pods. Special "self-defense pods" were built for dangerous missions; they gave up some cargo capacity for more defensive weapons. Starliner pods (luxury accomodations for hundreds of passengers) were built for use in transporting government personnel.

During the General War, the tugs were refitted with two phaser-3s and a missile rack (loaded with anti-missiles) to defend against Klingon drone attacks.

Data: two 36 GW warp engines, 12 GW impulse drive, reactors (3 GW total), batteries (6 GW total), no photon torpedoes, four phaser-1s, two phaser-3s, one missile rack, two transporters, two tractor beams, two shuttlecraft, crew 220, Marines 10.

OTHER SHIPS

Star Fleet operates numerous other types of ships, although in smaller numbers than the main classes.

Police Cutter: The Federation police operated over two hundred "cutters" of this type. This is the standard patrol ship they use.

Data: two 15 GW warp engines, 6 GW impulse drive, reactors (3 GW total), batteries (6 GW total), one photon torpedo, three phaser-1s, two phaser-3s, one missile rack, two transporters, one tractor beams, two shuttlecraft, crew 100, Marines 20. This ship also had a cargo bay, usually loaded with emergency and relief supplies to assist colonies that had suffered some calamity.

Armed Priority Transport: A very common ship type, most empires had something very similar. It was small and cheap, yet a capable starship able to deliver small priority cargo loads. It was fast enough to work with the fleet.

Data: two 9 GW warp engines, 3 GW impulse drive, reactors (15 GW total), batteries (3 GW total), no photon torpedoes, no phaser-1s, one phaser-3, no missile racks, one transporter, one tractor beam, one shuttlecraft, crew 40, Marines 10, and some cargo space.

There were several variants of this ship. One was designed for rescue and recovery. Another had no cargo space but several more weapons and a larger crew.

GUNBOATS

The Federation simply did not use gunboats (also known as fast patrol ships or PFs) such as the Klingon G1 or the Romulan Centurion and StarHawk. The Federation revered sentient life above all, and felt that risking the lives of 27 sentient beings to crew a gunboat was unthinkable, while risking the lives of two pilots in an F-111 heavy fighter was (somehow) "noble" and brave.

DRONE-MISSILES

Drone-missiles are used by the Federation, Kzintis (as their primary weapon), and Klingons. They came in several types, of which four were the most common:

Standard type-I drones, the same kind used by ships against ships and fighters.

Heavy type-IV drones, twice as large as a type-I, were harder to kill and carried a huge warhead.

Dogfight type-VI drones, with a short-range and small warhead, designed to be used against fighters. Some ships mounted this kind of drone in their missile racks for use against fighters and larger drones. The type-VI was half the size of the type-I, and was the only drone to use "warp seeking" guidance (which did not require the launching unit to show it the target). The small warhead did little damage to a starship but would cripple most fighters.

Special type-III drones, available in small numbers for special purposes and used only by the most advanced fighters late in the General War. Ships also used these. The two most common type-III missiles were the type-III-MW which mounted three type-VI drones instead of a true warhead, and the type-III-XX drone which was a "cruise" drone able to travel 200 parsecs and then identify its target from a computer database.

FIGHTERS

Fighters were special shuttlecraft, with larger than usual engines and smaller than usual spaceframes. This made them faster than shuttles; they usually had (with warp booster packs) the same tactical speed as starships. Strategically, they had much lower speed and much shorter range than starships.

Fighters were at first intended to provide increased firepower for bases and colonies. Shortly thereafter, special "carriers" were built to operate fighter-shuttles in fleet combat. (The carrier had to transport the fighters to the battle, as the fighters could not keep up with a fleet moving at strategic speeds.)

Most fighters had a single pilot, although all designs had a variant with a second seat that was used for training. These two-seat variants were later used in squadrons (one per squadron) to provide electronic warfare support.

Most fighters had one or two forward-firing phasers, and Federation fighters mounted drones (not missile racks, just on rails) under the "wings." The "wings" were there to provide space for the drone rails. The wings gave fighters assigned to a planet a limited ability to glide home (if they could get back inside the atmosphere) after suffering damage in combat.

The Federation believed in a "high-low mix," using one fairly common fighter design in vast numbers and a second very expensive design in limited numbers for special missions to provide "leverage" for the other fighters.

F-18 Hornet: The standard naval fighter (replacing the old F-8), this mounted two phaser-3s, two standard drone-missiles, and two smaller "dogfight" drone-missiles.

F-14 Tomcat: The "high end" naval fighter, used only on a few carriers. It is one of the two best fighters in space, but available in very limited numbers as it is expensive to build and maintain. It mounts a Gatling phaser and a considerable array of drone-missiles, including four type-III special drone-missiles, two type-I anti-ship drone-missiles, and two type-VI dogfight drone-missiles.

F-16 Falcon: The standard planet-based National Guard fighter, it mounts a phaser-3 and two type-VI dogfight drone-missiles. (Later versions had two type-Is instead of the type-VIs.) Some F-16s mount Gatling phasers, but due to the expense and the maintenance problems, this version is used only on wealthy and well-developed planets or those at considerable risk.

F-15 Eagle: The expensive "high end" National Guard fighter used only on major industrial planets (Earth, Mars, Andor, and a few others), this large fighter mounted a Gatling phaser, four type-VI dogfight drone-missiles, and four type-I drone-missiles.

F-111 Vark: This very large fighter (it would not fit inside any carrier and had to be carried on external links) was what the Federation used instead of a gunboat. It had a phaser-G and a phaser-2 (and a rear-firing phaser-3), and could carry a wide variety of drones on its rails and in the internal bay. A common drone-missile load included one type-IV heavy drone-missile, two type-III special drone-missiles, four type-I anti-ship drone-missiles, and four type-VI dogfight drone-missiles. It also had six anti-drones.

DECK PLANS: *BURKE*-CLASS FRIGATE

The Federation Star Fleet's *Burke*-class frigate was its smallest standard warship. Consisting only of a small saucer with two small warp engines below it, the frigate had about half of the capability and firepower of the *Constitution*-class heavy cruisers with which readers are probably more familiar. The point of frigates was that they were cheap, and could be produced by smaller shipyards (available at more planets) than the heavy cruiser. At any given time, Star Fleet had about three times as many frigates as it did heavy cruisers. They were used for small jobs that didn't require a more expensive cruiser, and during fleet battles they protected the larger warships. By the end of the General War, frigates across the galaxy had been sent to secondary missions (such as convoy escorts) and replaced in combat by war destroyers, which were about a third larger than frigates.

The deck plans in this product are intended to show players how starships work internally. While half the size of a cruiser, the frigate was a fully functional warship and could do everything a cruiser could do, just not as much of it at the same time.

Standard crew is 18 officers and 140 enlisted. This includes 30 Marines and four shuttle pilots.

DECK 1: BRIDGE DECK

This deck is completely occupied by the bridge and its associated systems. The bridge is primarily accessed through a turbolift car, but there are two floor hatches for emergencies (these access the vertical service shafts on Deck 2) and two stairwells for use when the turbolift is not available or when personnel are only going one deck down and don't want to use the turbolift. During shift changes or when the ship is called to action, it is not practical for 6-10 people to arrive from all over the ship in three-to-five turbolift cars; most actually arrive via the stairwells. The stairwells actually descend all the way to Deck 5.

The captain (or whoever has "the con") occupies the center seat in the bridge. This seat swivels 360° to allow the captain to look directly at any of his bridge crew or their instrument panels.

The two seats in front of the captain are the helmsman (left) and navigator (right). Their stations are identical and either of these officers could do either job (or both). When cruising with no expectation of combat, it is not unusual for only one of these seats to be occupied. By switching the mode of their panels, either of them could assume the job of weapons officer should that be necessary.

In front of the captain and to his right is the tactical station, with two seats. Normally, one of these is occupied by the weapons officer and the other by an enlisted weapons technician.

Behind the captain to his right is the science station, which has two seats. Normally, only one is occupied, the other being in effect an extra seat for someone called to the bridge for some reason. During scientific missions or tasks, this second station (which usually references the library) can be used by a second scientist. In some cases, this seat is used by an assistant navigator. In combat, this place is often taken by an officer assigned tasks related to tactical intelligence. On routine duties, the seat is often used by the executive officer. Both stations have full access to the ship's external sensors.

Behind the captain and to his left is the engineering station, responsible for power, environment, and damage control. Normally, one of the two seats is occupied by an engineering officer and the other by an enlisted technician. In front of the captain and to the left is the communications officer and the Marine unit's executive officer (responsible for internal security and boarding actions).

There are small restrooms (used only when someone who cannot be spared from duty really needs to use it) and a storage locker containing enough food for three days, and a small number of hand weapons for self defense.

The service corridor around the bridge provides extra protection from external damage, and provides access to the various electronic systems and panels (which can also be accessed, less conveniently, from inside the bridge). In wartime, it is not uncommon to find extra rations, spare parts, bedding, and extra weapons stored in this corridor.

The bridge, being a critical system, is provided with two complete and independent environmental systems, beyond being serviced by the ship's overall environmental system. These allow the bridge to be sealed off and remain functional for seven-to-eight days.

DECK 2: PHOTON DECK

At the front of the elliptical second deck are the ship's two photon torpedo launchers and their associated systems. This is where the anti-matter to activate the torpedoes is stored in armored containers. On ships without photon torpedoes (variants such as commando ships, police flagships, etc.) other systems occupy this space. Scouts and police flagships have special sensors here, for example. Drone ships have missile racks.

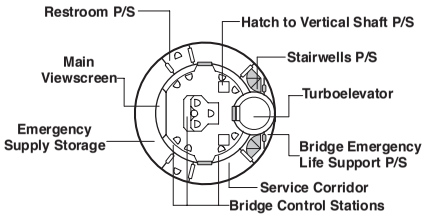
Directly behind the photon compartment is the photon torpedo control room, which contains the gunner and technician needed to operate, recharge, and fire these weapons. (While this can be done from other locations, this gunnery crew, being closest to the weapon, can do so more efficiently.) Note that the hatches to all weapons compartments, weapons control rooms, and control spaces are armored bulkhead doors.

To the right of the photon torpedo control room is the captain's office. This can be fitted out in various ways as the captain sees fit. All of these offices include the captain's actual "business desk" but everything else varies. In this case, the captain has elected to have a small table with chairs for meals or meetings with key officers. Other captains use the extra space for a bed (so they can sleep close to the bridge), or for a desk for their yeoman.

To the left of the photon torpedo control room is the briefing room, intended for meetings of the captain and his department heads. It can also be used for business and diplomatic functions. This briefing room is used by the duty shift for meals and as a gathering place for the shift about

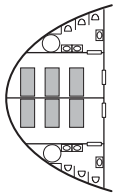
Frigate Deck Plans: Sheet 1

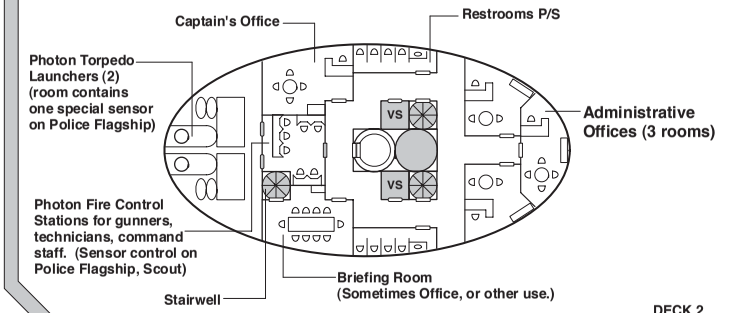
Star Fleet Command:
Shipyard/Naval Architecture Division:
Archive Database Printout



DECK 1

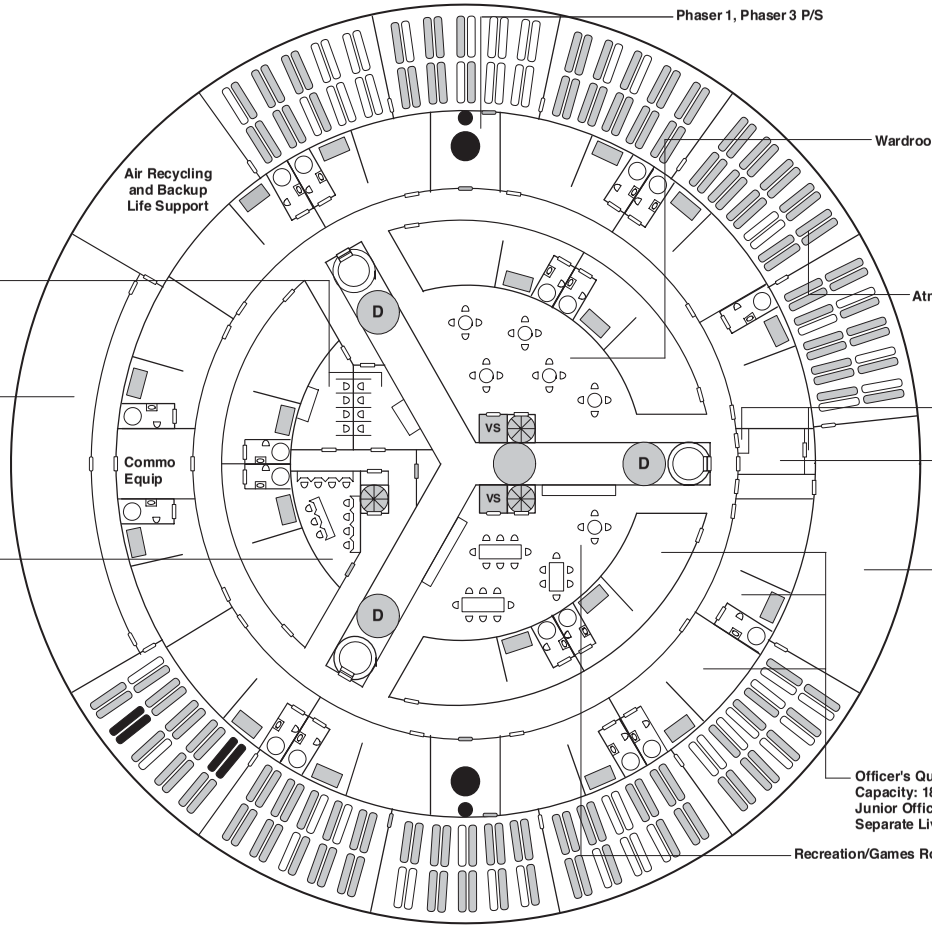
Additional quarters replace photons on carrier and marine variants.

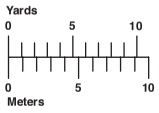




DECK 2

DECK 3





- Doorway, typical.
- Doorway, armored security.
- Maintenance hatch, common areas.
- Maintenance hatch, hazardous areas.
- Control console with chairs.
- Bed/examination/operating table.
- Crew quarters bathroom unit.
- Table and Chairs
- Stairwell (spiral).
- Turbolift shaft up and down.
- D — Turbolift shaft down only.
- Turbolift car and shaft.
- VS — Vertical equipment shaft with hatch.
- Atmospheric Gas storage.

to come on duty.

The forward stairwell on this deck goes all the way down to Deck 7, the very bottom of the ship. At the rear of this area are offices for the executive officer and other department heads. In the center part of the deck are the restrooms ("heads"), turbolift shafts, vertical service shafts, stairwells, and some storage space. On some ships, one set of restrooms is replaced by storage or small offices.

DECK 3: OFFICER'S COUNTRY

Most of the ship's officers are quartered on this deck, seen at left. There are 18 single rooms, each with a bedroom, living room, and bathroom. During peacetime, this is enough to accommodate the officers of a normal crew. Warships during wartime tend to accumulate a few extra personnel when they can, to provide additional skills or crew rotations. (During peacetime, the second and third shifts in the crew rotation are much smaller than the primary daytime shift; during wartime these two shifts are often the same size as the main shift.) Additional officers can be accommodated by the ancient naval tradition of having the junior officers double up, either using bunk beds or turning the living area into a second bedroom.

On either side of this deck are the components of the ship's phasers, including a standard phaser-1 and a defensive phaser-3 on each side. Also on this deck is the primary phaser fire control room, designed to be manned by a crew of 6-to-11 people. (With more automated controls, the Federation often provides fewer technicians than the Klingons to support the four gunners.)

The ship's primary air recycling and storage areas are on this deck, providing atmosphere for the entire ship. Also on this deck is a restroom ("head"), the wardroom (officer's lounge and dining facility), and a recreation area used by the entire crew. The ship's turbolift system services this deck (with four stations) as does the stairwell and vertical service shaft system. It should be noted that there is an unseen horizontal connector between the two vertical service shafts on each deck as part of the "ceiling" where the environmental systems feed each compartment.

The airlock at the rear of this deck is one of the primary means of visitors and personnel entering the ship when it is docked at a base. The recreation and lounge areas serve as muster points during an emergency evacuation; personnel gather there to await their turn to leave via the airlock.

There is a storage compartment on this deck for an emergency solar sail which could, in the event of a total power failure, provide power through solar cells and even a (very slow) method of propulsion.

DECK 4: MAIN DECK

In naval architecture, the term "main deck" is used for the highest deck that covers the entire length of the ship, as is the case here. This is where most of the crew resides, bunked in 90 staterooms with two enlisted personnel in each room. Each such stateroom has two sleeping areas with shared restroom. In some cases, both personnel sleep in one side (either in bunk beds or double or twin beds) and use the other half as a living area. Married or committed personnel often bunk in this way. Some senior enlisted personnel have a room to themselves. During wartime, extra (junior, of course) personnel are accommodated by using bunk beds in each sleeping area. (These quarters are shown without such details as chairs, fold-down desks, locker-closets, etc., as arrangements vary.)

The deck is accessed by the turbolift system (with 10 stations), the three stairwells from above, and three additional stairwells that originate on this deck and go down to Deck 5. There are docking ports (1) on either side and the front of this deck, allowing the ship to dock with other ships, or with bases or some types of shuttles.

There is a large crew mess hall (6) in the forward sector of this deck, where most people eat (in three shifts). The kitchen is on Deck 6 (relatively little of the food is replicated due to the energy costs) and sends food to the mess hall by way of the dumbwaiters forward of the stairwell. Restrooms are provided on the starboard (right) side of the mess hall. The two conference rooms are often used as dining areas for senior NCOs or junior officers.

Forward of the mess hall is a small dining area (14) used for special dinners or other functions (and some staff meetings). When not otherwise scheduled, any crew members can reserve these dining rooms for intimate dinners, parties, or meetings of the various off-duty hobby clubs that keep the crew entertained during long voyages. (Should such a club do a presentation of interest to many of the crew, this would be done in the mess hall. Most ships have various drama and musical clubs to provide entertainment.) The lounge (2) at the rear of this deck is usually reserved for the ship's senior and chief petty officers, most of whom are bunked in the nearby staterooms.

In the left rear sector is the sick bay (8-13), including examining, treatment, and operating rooms as well as the chief surgeon's office and other medical facilities.

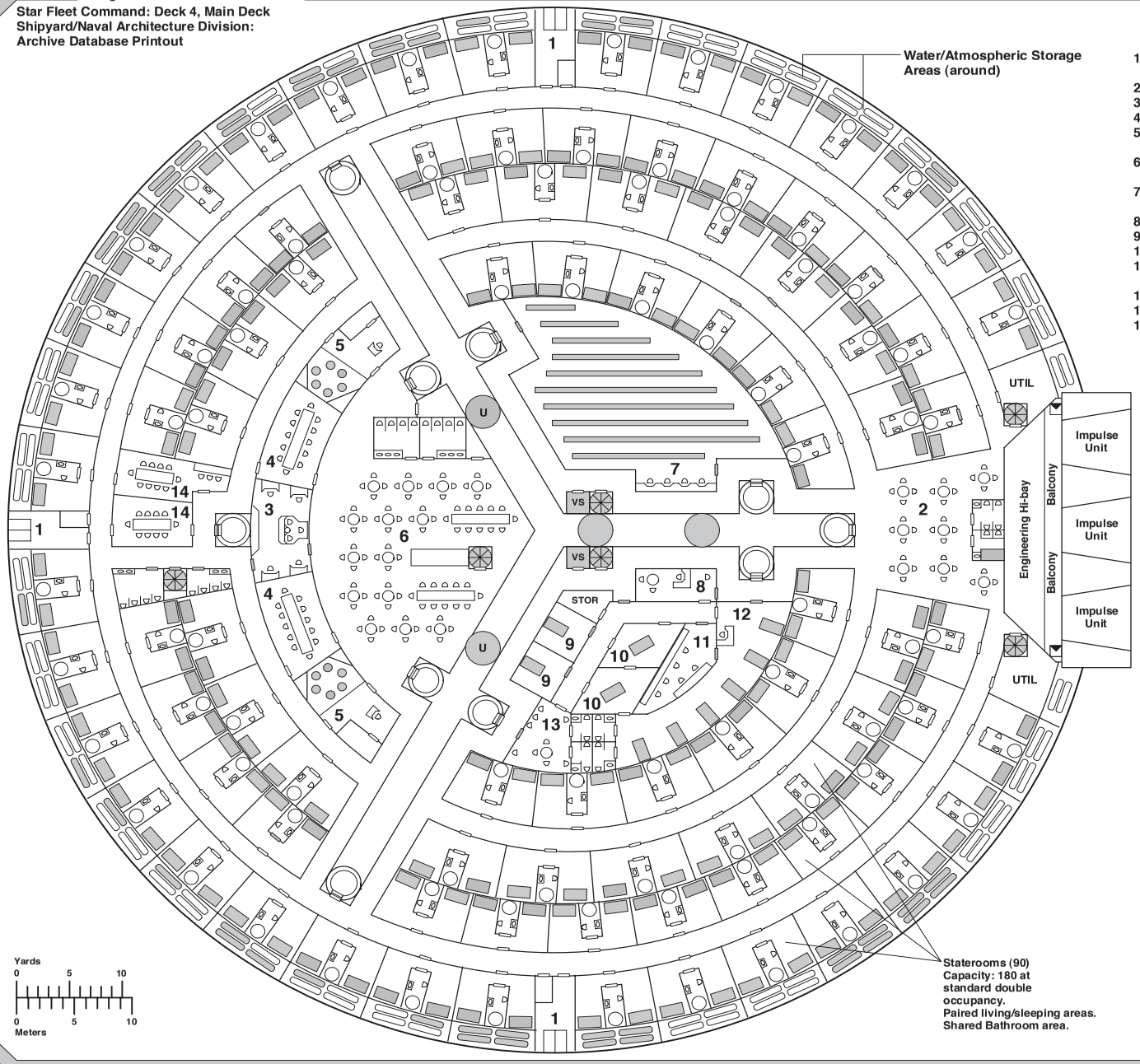
In the right (starboard) rear sector is the ship's main computer (7) and its numerous backup systems. The computer would not need to be this large except that Star Fleet insists that everything be done through Microsoft Power Point™ 312.0 slides.

Around the rim of this deck are the liquid storage tanks. For combat survivability, some atmosphere tanks are on this deck, while some of the storage tanks on Deck 3 contain liquids.

The ship's auxiliary control room (3) is forward of the mess hall. This compartment can assume control of the ship from the bridge during a combat emergency. During normal cruising, this compartment is manned by only a few personnel (usually conducting drills or training); during combat it is fully manned and may be assigned certain functions such as internal defense against boarders.

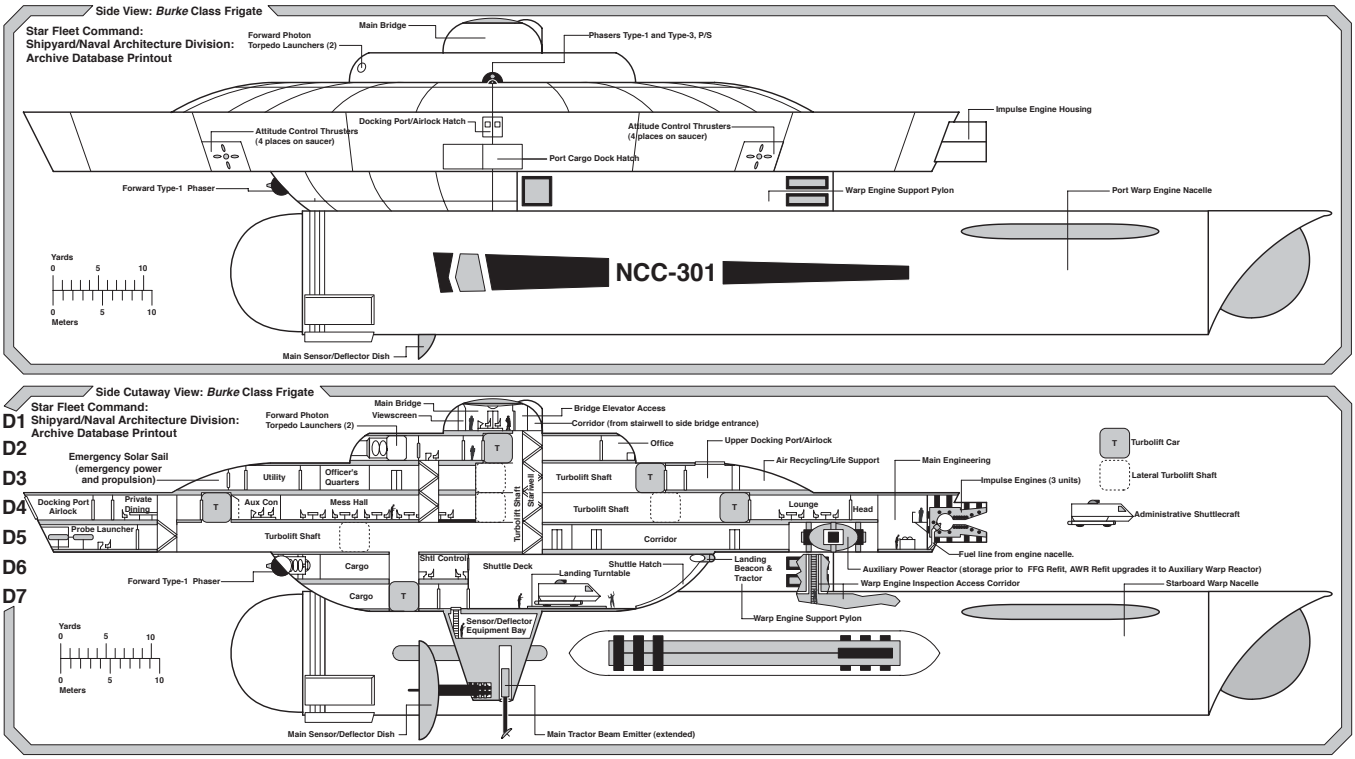
There are two briefing rooms (14) adjacent to auxiliary control. These are used as scheduled by various duty section supervisors to prepare for their upcoming shifts. These can also be used to brief landing parties and as extra dining areas. These can also be used for various meetings, presentations, diplomatic functions, etc. Adjacent to each briefing room is one of the ship's two transporters (5), used

Frigate Deck Plans: Sheet 2
Star Fleet Command: Deck 4, Main Deck
Shipyard/Naval Architecture Division:
Archive Database Printout



1 Docking ports/airlocks and equipment/spacesuit lockers (3 places).
2 Petty Officers Lounge/restrooms.
3 Auxiliary Control Room.
4 Briefing Room (2 places).
5 Transporter Room (standard 6 person) and equipment lockers (2 places).
6 Messhall, adjoining restrooms, Storage Rooms (2), Food conveyer to kitchen on deck 6 and main stairwell.
7 Ship's Computers/electronic equipment room and monitoring stations.
8 Chief Surgeon's Office.
9 Examining Rooms (2). Walls here are movable partitions.
10 Operating Rooms (2). Walls here are movable partitions.
11 Medical Lab, Sickbay also uses space in the Biology and Chemistry labs on deck 5 when needed.
12 Medical Ward/ICU, restrooms.
13 Waiting/entry room, restrooms.
14 Private Dining Rooms with movable center partition/restrooms.

Doorway, typical.
Doorway, armored security.
Maintenance hatch, common areas.
Bed/examination/operating table.
Crew quarters bathroom unit.
Table and Chairs
Control console with chair.
Stairwell (spiral).
Turbolift shaft up and down.
U Turbolift shaft up only.
Turbolift car and shaft.
VS Vertical equipment shaft with hatch.
Computer/electronics bank.
Ladder down.
Atmospheric Gas storage.



to bring personnel onto the ship or send them to other ships. During the movement of large numbers of personnel, the adjacent mess hall is used as a staging area to handle arriving and departing personnel.

DECK 5: ENGINEERING DECK

This deck is where "the works" are located, the things that make the ship function but which are rarely seen on trivideo programs. Here are found engine control, cargo spaces, batteries, the kitchen, workshops, and the ship's thrusters. Access is provided by the turbolift system and all six of the stairwells.

At the front of this deck are the sensors and scanners (1) used for navigation, scientific research, and targeting the weapons. Also located here is the probe launcher (2), used for scientific and tactical data gathering and for "burial in space" for those who do not survive their mission.

To either side of these systems are the various laboratories, which are used to examine specimens collected from various planets. These labs can support the medical facility in some cases, and vice-versa.

Aft of the labs on the right (starboard) side is the chapel-theater (4), which can accommodate about half of the crew at any given time. On the opposite side is the brig (6-9), including the small arms locker (10) and holding cells. Even in wartime, the brig is not often used as a jail, and is more often used to store valuable or important supplies and equipment. During crowded conditions when no prisoners are being held, some of the surplus crew or passengers might actually bunk here.

Aft of the theater is the main turbolift maintenance and staging area (12). Aft of the brig is the replicator and kitchen area (11). Behind both are the main cargo transporters and the emergency evacuation transporters (13).

At the center of this deck are the vertical shafts, the turbolift access shafts, and the three main stairwells (two of which go no further down). Aft of this center area are the batteries (15), power control systems, and workshops. The emergency bridge (3) is to starboard (right) of center while the auxiliary power reactor (added to the original design by a refit when the General War began) occupies a former storage room on the port (left) side.

The main engineering control room for the impulse and warp engines is at the very rear of this deck (17). The chief engineer's office (18) is on the starboard side, while the engineering department's computers are on the port side.

On either side are the ship's cargo bays, used for supplies and spare parts. Large elevators provide access to and from the lower decks. At the midpoint of each side is the cargo handling hatch, literally large enough for trucks to drive through. The ship has its own forklifts for cargo handling. The water recycling systems and attitude control thrusters (used when docking) are also on this deck, on the outside edges.

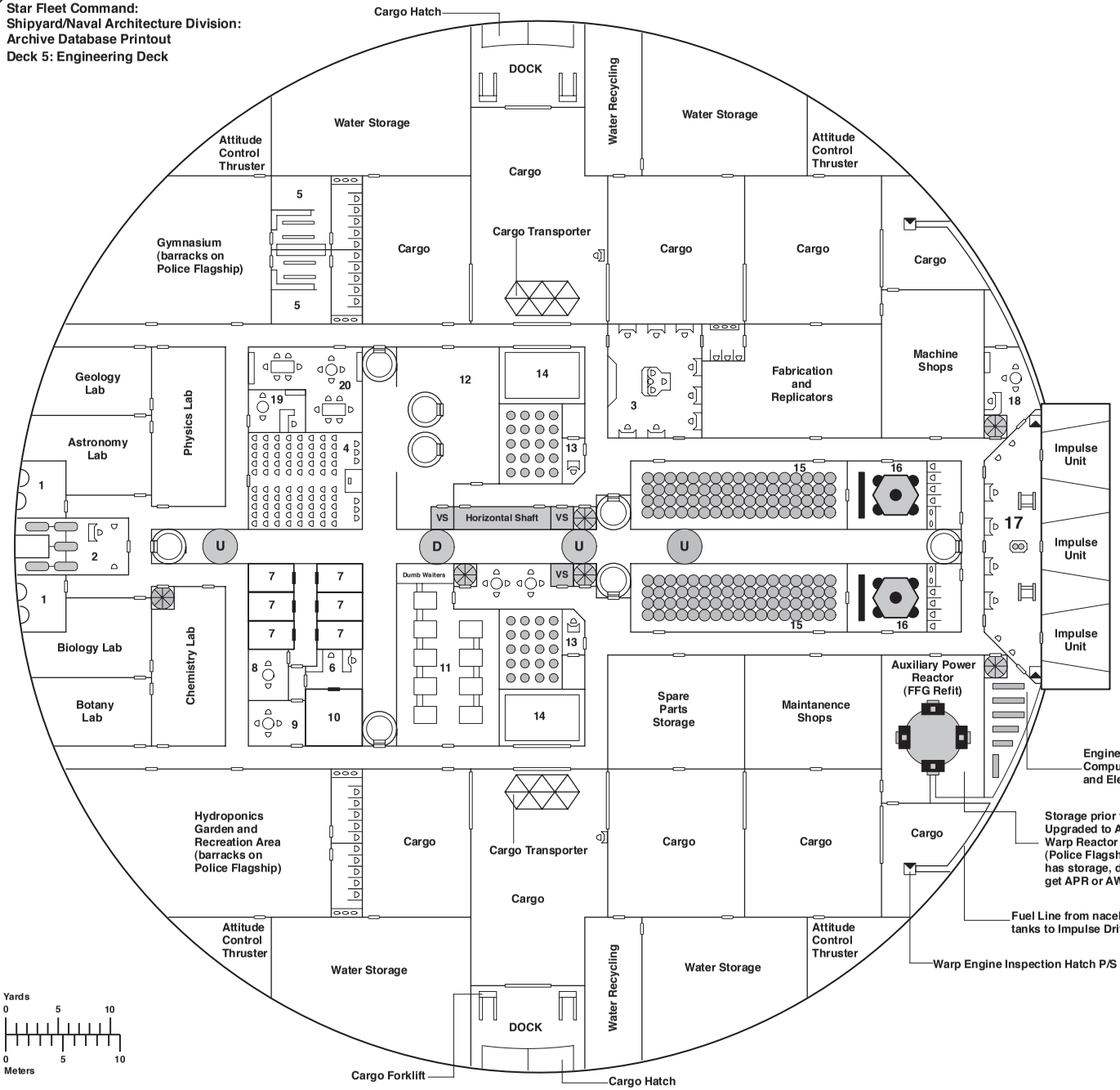
Forward on each side of this deck are the gymnasium (starboard) and hydroponics garden (port side). Large restrooms are provided on this deck as the cargo areas can be used to handle considerable numbers of passengers during an emergency or other mission.

The ship's warp engines attach under Deck 5 on either side. Hatches on the floor of the cargo bay provide access to the engines (when the engines are shut down) for inspections, repairs, and maintenance. Adjacent to each hatch is a fuel feed line that allows fuel (stored in the engine nacelles for use by the warp engines) to be fed to the impulse drive and the auxiliary reactors.

DECK 6: CARGO DECK

This deck is much smaller than the next higher deck, as it comprises only the "bulge" between the warp engines

Frigate Deck Plans: Sheet 3
Star Fleet Command:
Shipyard/Naval Architecture Division:
Archive Database Printout
Deck 5: Engineering Deck

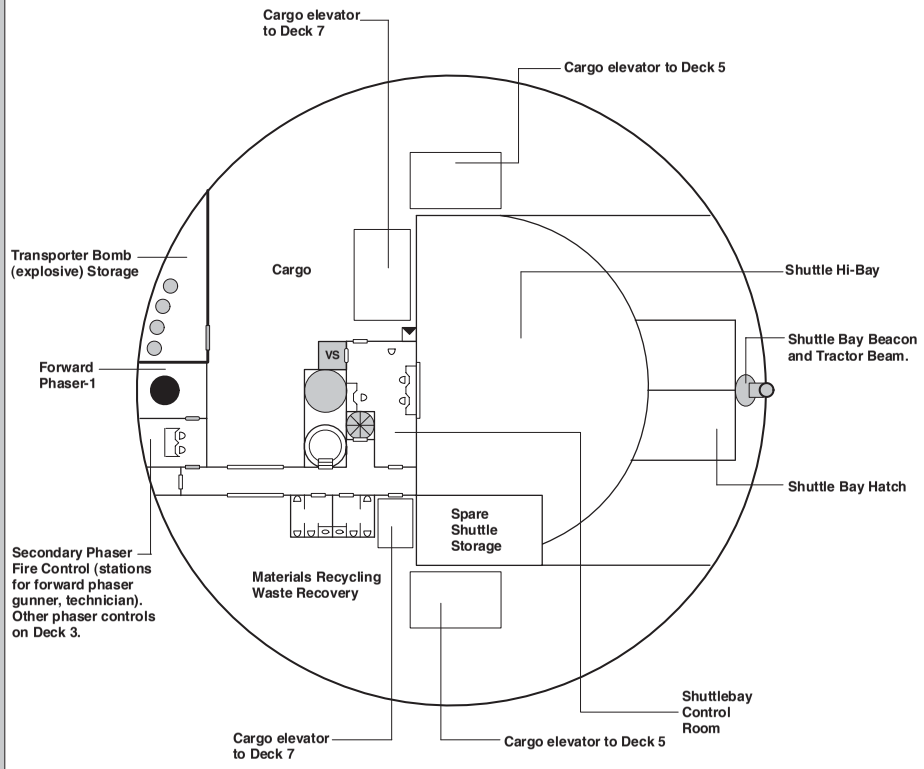


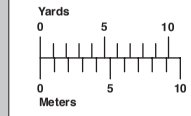
1 Scanner equipment mountings. (2 places)
2 Probe Launcher, track with 5 probes loaded.
3 Emergency Bridge.
4 Chapel/auditorium (capacity: 80, equal to 1/2 the standard crew).
5 Showers/locker rooms/restrooms for Gymnasium.
6 Security Office.
7 Holding cells (6 places).
8 Interrogation room.
9 Security Entry Foyer.
10 Small Arms Locker.
11 Food Replicators/kitchen with conveyer up to messhall on Deck 4.
12 Turbo Elevator repair shop.
13 Emergency Transporter (20 person) and equipment lockers (2 places).
14 Cargo Elevator to Deck 6 P/S.
15 Battery room (2 places).
16 Power Converters/Circuit breakers (2 places).
17 Main Engineering with adjacent restrooms.
18 Chief Engineer's Office with adjoining storage.
19 Science Office
20 Crew Recreation Room

Doorway, typical.
Doorway, security.
Maintenance hatch, common areas.
Maintenance hatch, hazardous areas.
Cargo forklift.
Control console with chair.
Stairwell (spiral).
U Turbolift shaft up only.
D Turbolift shaft down only.
Turbolift car and shaft.
Ladder up.
Ladder down.
Probe casings.

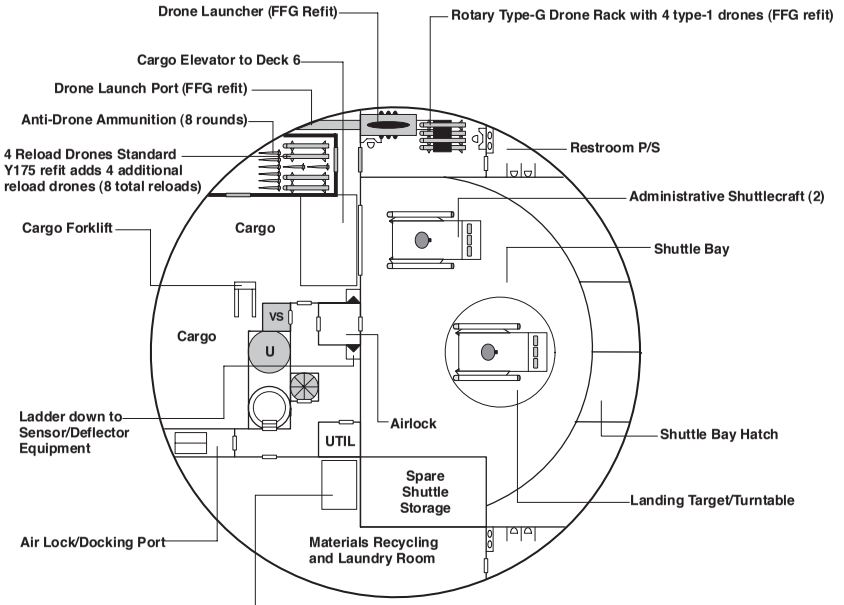
Frigate Deck Plans: Sheet 4

Star Fleet Command:
Shipyard/Naval Architecture Division:
Archive Database Printout

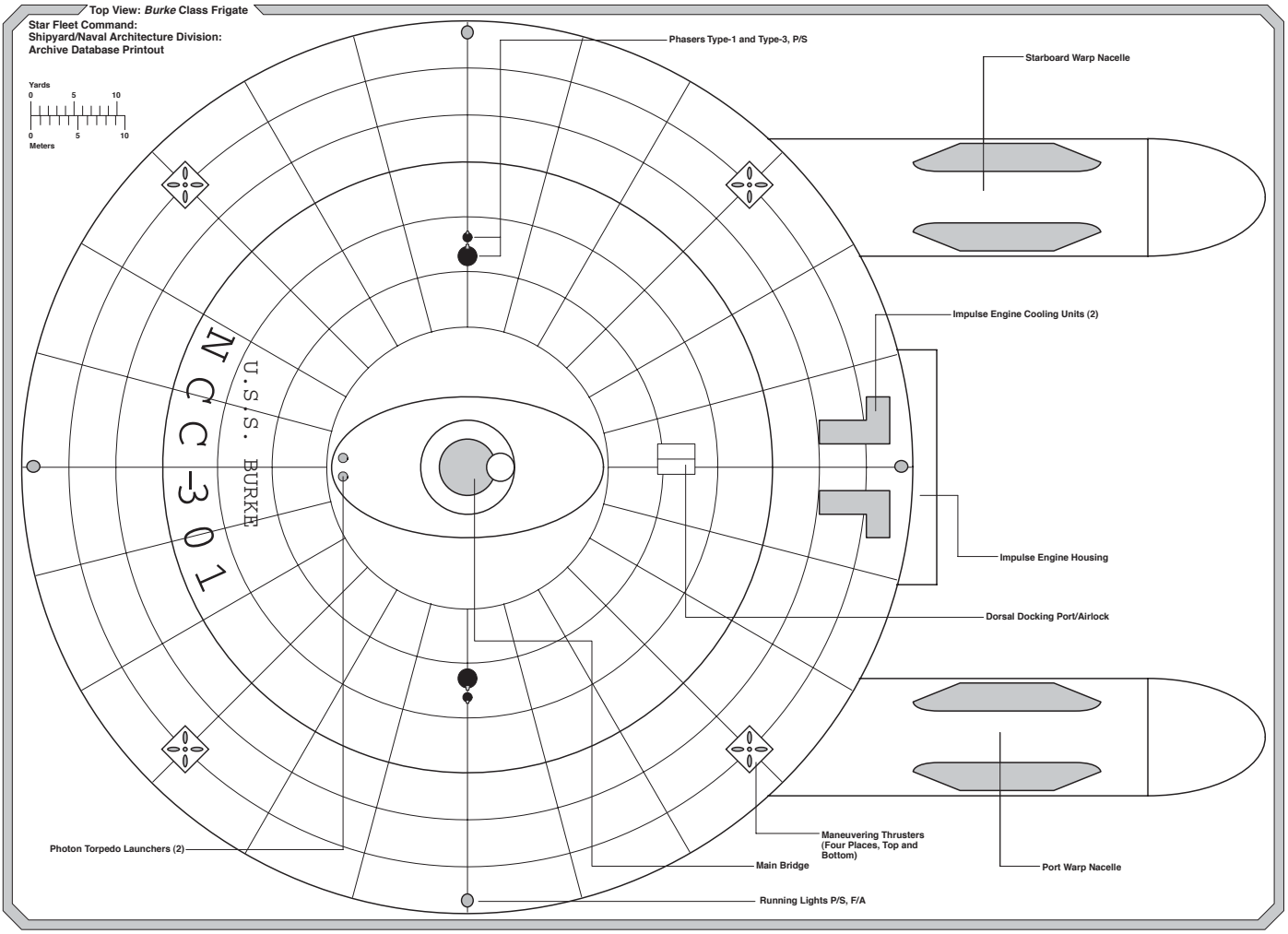




DECK 6
CARGO DECK



DECK 7
SHUTTLE DECK



on the underside of the saucer disk. This deck can be accessed by the main stairwell and a single turbolift station.

On each side of this deck is a cargo compartment, with an elevator up to the main cargo bays on Deck 5 and an a separate elevator down to the shuttle bay on Deck 7. The ship's stockpile of nuclear mines (used to discourage pursuit, block passes through asteroid fields, or for other uses) are stored on this deck so that they can be moved down to the shuttle deck (to be dropped from the hatch) or up to Deck 5 (where the cargo transporters can deploy them).

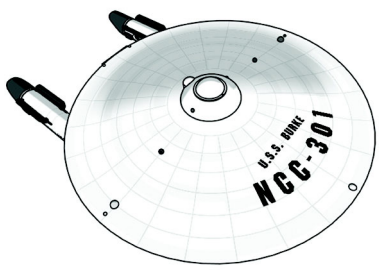
The waste recycling and materials recycling systems are on this deck. At the forward edge of this deck is the mount (and control room) for the forward phaser-1. The center and rear portion of this deck provide the "high ceiling" for the shuttle bay on Deck 7. The shuttle bay control room on this deck looks over the bay through large armored windows.

DECK 7: SHUTTLE BAY

This is the lowest deck. It is accessed by a single turbolift station, a single stairwell, the two cargo elevators, and the usual ladders. This deck is dominated by the shuttle bay, but also includes some cargo storage, the ship's drone (missile) launcher, a small docking port, the ship's laundry, and the balance of the materials recycling systems.

The shuttle bay has space for two shuttles; a third is kept stored in an inactive (and partially disassembled) status as a spare. The shuttles land directly on the turntable, making it easier for them to launch, but they can in fact land or launch backward (with some difficulty). The ship's tractors (used to help shuttles land, stop incoming missiles, or when docking) are on either side of the bay doors. By using emitters built into the hull, these tractors can function in any direction.

The ladder going down in the center of this deck leads to the sensor and navigational deflector array mounted on the bottom of the saucer.



VISIONS OF GLORY

INTO THE DARK

by Andrew Granger

Your team is sent to a remote planet, Terdranake-IV, to find and if necessary rescue a university scientific expedition that is overdue. The university team was exploring an underground complex on a planet that seems to have been consumed in a world-wide war a thousand years ago.

This kind of mission is perfect for a Prime Team, but (depending on who is available) might be assigned to a team of Marines, a team of Star Fleet personnel, a private contractor willing to undertake high-risk missions, or even University Security.

The last direct contact was made when the science team returned to the surface and contacted the small civilian ship leased to take them to the planet. They reported that something in the rock strata was affecting most of their technological equipment and they were forced to use hand tools to do their work. The team said they were headed back into the caverns and would report in two days. Ten days later, the support ship sent for a professional rescue team (i.e., *your* team).

This is a space-age dungeon crawl. Your team will have to work with only the most basic instruments. Even tricorders will be limited to passive recording. Your team leaves their phasers behind, but takes old-style firearms, explosives, and other such equipment. You will, in fact, take about three times as much equipment as you can carry, and will have to cache some of it near the entrance and retrieve it if and when you find it to be of use.

Finding the scientists is only the beginning; surviving to bring them out alive should be even more exciting and difficult.

Landing on the planet, some of your team start caching the surplus equipment while others take the first, superficial look around. A few hours into the cavern, you locate an obvious marker and find, at that location, a datadisk, a lot of stored food and equipment, and a written message: "Here is the last record. I came up to get more food and am going back down to try to help. Follow the markers to the big door. – Travers." You insert the data disk into your tricorder and it begins to play:

Doctor McCarthy coughed as the dust whirled around his face. While his brush danced lightly over the polished stone surface and among the plastic and metal inserts, he peered closely, straining to determine their use.

"I still do not understand why you don't just use the tricorder, Doctor. We really do not have time for this," Professor Saval said. The Vulcan was bending over Doctor McCarthy, obviously not happy with a face full of dust.

"The tricorders have not worked right since we got here, Professor. They'll record but won't translate, and they cannot see through this dirt, so let me do my job. We're already a week overdue."

"We would not be if Mister Travers had been able to reach the surface without getting lost," Professor Saval said without inflection.

"Hey, these caves all look alike!" Travers said from behind the tricorder that did the recording.

The light wavered a bit.

"Please hold the light steady, Mister Rowlins," McCarthy said. "Saval, if you are not going to help, you could at least stop casting shadows on the tablet."

The Vulcan straightened. "Well, what does it say?"

"The dialect is older than that which we found earlier. Odd, this section seems to be of later construction," McCarthy answered. He thought long and finally spoke.

"To those who find this tablet. You have entered a site which we cherish greatly. Here we leave all the works of our people, great and small. By the time this is found, we will be no more, but for those who seek us, we will leave something behind: a memorial to our lives and our deaths. For the rest of your lives, you will think of us. Enter the code printed below and receive what you have earned."

"Go ahead, Doctor McCarthy, enter the code," Rowlins urged.

"I am not sure I should. I do not like the tone of the message."

"It would be less than logical to come all this way, to lose contact for a week, and not see this through to the end," Saval added.

McCarthy wiped his hands on his trousers and whisked the muddy sweat from his face.

"I can't argue with your logic, Saval. Everyone stand back."

"A moment, Doctor. Travers, move back outside of the door, but continue to record." The image indicated that Travers had done as he had been told.

McCarthy slowly entered in the code printed on the stone surface. The whirring sound that began behind the stone wall reminded him of an old-fashioned computer as it booted up. Lights snapped on in the room from recesses so well hidden in the ceiling as to make them all but invisible. Saval noticed a slight vibration in the floor. A pale hologram flickered on behind them, floating in front of the door to the room. The creature stood with its multi-jointed legs, all four of them about a meter apart. In one of its six hands it held a long-bladed weapon. Mouths on both sides of its pointed snout curled into wicked smiles, as the door slammed shut.

DONJEBRUCHE TRADING POST

Located on Tafelland, a Class-K planet in Federation space, Donjebruche Trading Post is an adjunct to the Groenveldt colony. Close to the Klingon border, and near enough to Kzinti space to allow easy peacetime trade, the trading post is a convenient stop for traders and travelers in the area. Being less than a thousand parsecs from the infamous Orion Pirate bastion known as Mad Jack's Hole, Donjebruche Trading Post has also become a legal point of sale for purloined items that are "laundered" by the Orions and ready to re-enter the market.

Donjebruche Trading Post is a very cosmopolitan "town" (numbering 10,000 people by the time of the General War). The town is fed (literally) by the agricultural community of Groenveldt (which regards Donjebruche as "sin city," their residents rarely going there). The town of Donjebruche existed before the Federation reached this area and was not originally a formal colony. The legal status of the town is less clear than the official Federation records would seem to indicate, and residents of the town regard themselves more as citizens of Donjebruche than citizens of the Federation.

There are a dozen large mining complexes around the planet, all of them in desert areas. These have populations from a few thousand to 20,000 and are effectively small independent "company towns." All of their citizens regard Donjebruche as the place to go and have a good time or to shop in stores not run by their employers.

SYSTEM SURVEY: Afrikanius

Star Class: F9V yellow-white dwarf (1.05 stellar masses).

Planets

I. Gesmolten: This is a Class-I hot rock, 4,632 miles in diameter, similar to Mercury.

II. Rokerig: This is a Class-C hothouse, 6,897 miles in diameter, with temperatures too high for even brief visits and a corrosive atmosphere.

III. Tafelland: This is a Class-K desert planet, similar to Vulcan, with no oceans to speak of. It is 8,101 miles in diameter. See the planetary survey.

IV. Bevroren: This is a Class-O frozen planet with a thin atmosphere. It is 6,277 miles in diameter. There is a mining colony here operated by Mars Mining & Manufacturing. It has a population of over 10,000 people, mostly Humans and Cygnans.

V. Blauw: A large Class-A hot gas giant, similar to Jupiter. There are over 60 moons, some of them fairly large. Two dozen have small mining operations, and three of them have significant colonies (with populations of over 5,000). One is operated by Cygnus Trans-Star Mining, one by Mars Mining & Manufacturing, and one of them (a former Klingon mining colony) is operated by expatriate Dunkars.

VI. Groen: This is a Class-B cold gas giant with six moons, none of which are mined on any regular basis.

VII. Buitenst: This is a Class-Q iceball.

VIII. Afgelegen: A small Class-Q Kuiper belt object.

PLANETARY SURVEY: Tafelland

I. GENERAL INFORMATION

Status: Minor colony world.
Location: Coordinates 2007, Federation.
Mass: $5.7x10^{21}$ metric tons.
Density: 5.5.
Diameter: 8,101 miles.
Class: K.
Surface Area: 206 million square miles.
Land Area: 205.99 million square miles.
Land Area as Percentage of the Surface: 99.5%.
Surface Gravity: 1.01G.
Mean Surface Temperature: 88°F.
Surface Pressure at Sea Level: 1.04.
Atmosphere Composition: Nitrogen 77%.
Oxygen 21%.
Argon: 1%.
Trace Gasses: 1%.
Pollution: Very minor in the two small industrial areas.
Orbital Distance: 95 million miles (1.02 AU).
Day: 26 hours.
Year: 376 local days (407 Earth days, 1.11 Earth years).
Axial Tilt: 17°.
Population: 300,000.

II. BIOSPHERE

Most of Tafelland is simply a barren desert, but the valley basin of Groenveldt is virtually Class M in most respects. There are significant mountain ranges and vast continent-sized slabs of granite. Tectonic basalt plates under the sand move at the normal rates for such things (similar to Earth).

At one point, a Star Fleet survey ship calculated that a few thousand comets could be crashed into the planet over a period of a century or two, elevating it to Class L, but this plan was never put into motion.

III. HISTORY

While Donjebruche is the primary location of interest to off-world visitors, the history of the planet begins with a separate agricultural colony few off-worlders visit.

Groenveldt colony was founded in Y47 by a group of human colonists from southern Africa. It was a polyglot group of people (virtually all of them of Dutch or English ancestry, but about 5% were Germanic), including adventurers, traders, farmers, and miners. Descendants of a separatist white group in old South Africa, they would have rejected the title "racist" but were unreservedly "separatist" and wanted to ensure that their children did not intermarry with other groups.

They set out from Earth in Y39 in a fairly slow colony ship, with most of the people in stasis. Their goal was to go "as far from Earth as we can go" and set up a self-sustaining colony. At the time, the entire concept of "which empire you are in" was virtually unknown and it was assumed that it would be decades, if not centuries, before the colony became part of any future interstellar economy. While the ship contained only 600 human colonists (all but

10 of them in stasis), they had the frozen embryos of 1,000 more unrelated Caucasians, on the theory that they needed a broader gene pool to set up a colony that would survive over the centuries. Many couples on Earth "sent one of their children" to be part of the new colony.

After investigating several possible planets, and having met briefly with the Mantorese, Cygnans, and a colony of Klingon monks of the Khortan Order, the working crew woke up the colonial leaders and presented the options. There were three possible places. One was a very nice Class-M planet which later gained the name Shiloh. A second was a marginal Class-L planet with what were clearly great mineral resources that could mean strong exports in the future. The third was a Class-N oceanic planet with volcanic island chains, a choice that was quickly rejected.

The colonial leaders debated for nearly two weeks as the ship coasted through space, and finally selected the planet Shiloh. This had some mineral wealth (and the potential for plenty more) but more importantly, it had good weather and excellent agricultural potential.

But fate took a hand. On nearing the Shiloh system, the ship detected signals from an alien military power (the Kzintis) and the colonists knew from discussions with the Mantorese that they should stay away from the Kzintis to avoid enslavement. The colony ship turned and fled the area at its best speed, and the colonists went back into stasis, all three of their choices left far behind. Shiloh was briefly visited by the Kzintis, who found little interest in it and did not remain very long. A half-century later, another group of human colonists found the planet and it was they who gave it the name Shiloh.

The South Africans pressed on, heading away from the Kzintis and from Earth. They found several marginal worlds and no end of worlds that could be inhabited only with artificial environments, which they had no equipment to maintain. Finally, their fuel and supplies nearly exhausted (not counting the colonial "start-up stocks" that the population would need when awakened from stasis), the ship came upon the Class-K desert planet that they named "Tafelland." The name came about because of the huge granite "mesas" that seemed to be "floating" on the sand (Tafelland in their native Afrikaans-Dutch). In the shadow of a huge mesa, there was an oasis, a region that (through a combination of factors) had accessible water.

Like all deserts, the planet got *some* rain. The rain that fell on the hard granite mesa ran southwest and collected in a valley on the edge. Ten thousand square miles of what little rainfall there was all ran "downhill" into 500 square miles of valley basin, producing the oasis. The colonists named the basin Groenveldt and established their homes. They quickly planted crops and colonial history insists that the first root vegetables were on dinner tables within 44 days. Crops of wheat, potatoes, and other foodstuffs were harvested in a few months, and by the end of the first year, a crop of cotton was providing replacements for the worn-out clothing of the industrious colonists.

The colonists found deposits of copper and tin and were able to produce bronze tools to replace their original tools as they wore out. The colony survived and grew, as the frozen embryos were carried to term by the women of the various families.

The first Klingons visited in Y82 as a Klingon ship surveyed the system. The Klingons made no attempt to "conquer" Groenveldt (it was not important enough to bother with) but did set up mining operations in the system a few years later. The first human ships (independent explorers) visited a few years later. These original contacts (which involved some trading) were a bit of a cultural shock to the Tafellanders. (Only the space crew had met the aliens in the original journey.) Being separatists, they were nervous about the aliens, but it was obvious that interbreeding wasn't going to be an issue. More to the point, the Tafellanders had become a bit bored, curious about news of their original homeworld, and frustrated by the limited resources of their adopted homeworld.

Over the next decade, an impromptu spaceport was created on the granite mesa, and a small "town" sprung up there which became known as Donjebruche Trading Post. The separation (travel up and down the cliff edge of the mesa was difficult enough to discourage casual visitors) insulated the Tafellanders from the visiting aliens, while providing a market to sell their agricultural produce and to buy off-world products they could not make. A Klingon merchant sold the Tafellanders a few worn-out shuttlecraft, which were more than adequate for atmospheric flight. The Tafellanders (with the help of a visting Star Fleet ship) quickly found even more mineral resources, and the colony established two remote mining posts, but these were never successful, as few Groenveldters wanted to live in the desert regions, and even fewer wanted to work alongside off-planet laborers.

The Klingon mining colony on one of Blauw's moons brought more demand (and resources) to the market. The Border Declaration of Y102 upset the Klingons, but negotiations a few years later turned the mining colony over to Dunkars (whose citizenship status was murky). The two Federation-Kzinti wars brought more Star Fleet ships to the area, which steadily changed the Tafellander viewpoint of the galaxy and their place in it. Star Fleet bought foodstuffs and refined metals from the Tafellanders, selling them more advanced technology and other products.

More and more off-world people arrived on the planet, as corporations from Earth, Mars, Rigel, Mantor, and Cygnus established mining operations. The original colonists at Groenveldt were concerned over this. As a practical matter, they had no real way to stop off-world colonization of areas they had no real interest in. As the mining operations bought more and more food from the abundant Groenveldt farms, the South Africans came to tolerate their neighbors. The Groenveldters remained in exclusive control of the farmland (and kept to their separatist ways) while enjoying the booming economy, wealth, and off-world products that came and went through Donjebruche Trading Post. Donjebruche became exclusively inhabited by arrivals from off-world, but an automated high-speed railway joined the two communities. One visiting anthropologist described it as "Las Vegas on one end of the railroad, and an Amish farm on the other end." The cultures of Tafelland

and Groenveldt diverged and remain very different.

During the General War, Afrikanius and Tafelland were far behind Klingon lines. The Klingons simply replaced the Federation as the outside trading partner (albeit on less favorable terms). With little real choice, the Tafellanders dealt with the situation and the lower standard of living until the Federation recaptured the area late in the war.

IV. CULTURE OF TAFELLAND

Government: This planet was not the first or only one that the Federation found within its territory with a functioning colony that had not been specifically chartered by the Federation. The situation was muddy at best. Each of the separate communities depended on all of the others, but there was no single government and the thousands of miles between any two communities (and low population compared to the resources available) made conflict between communities unlikely.

Groenveldt and the mining towns had no trouble running their own business, but Donjebruche was little better than the wild west, with the equivalent of "local warlords" using "militias" to run each of the town's neighborhoods. A trading corporation from Rigel operated and policed the spaceport, but going outside of that area was, well, always an adventure and sometimes dangerous. On three occasions, a Star Fleet ship had sent Marines into the town to clean the place up, but it never stayed cleaned up.

A team of experts was sent to negotiate a solution in Y104. The mines were swiftly made "franchised colonies" belonging to their corporate owners, and policed under Federation law. (Two of them, owned by Orions connected to local pirates, were the subject of investigations by Federation marshals. They were eventually declared criminal enterprises and seized, then sold to corporations.) Groenveldt was already taking care of such things as real estate law, local police, elections, and the social contract; it was simply given the formal power to continue doing so. (The leaders of that community were amused by this "needless formality" but found it convenient in later years.)

Donjebruche was the problem, since it was the only place off-worlders wanted to visit and it was virtually lawless. (Many ships wanted to make port calls there, both to get fresh food and visit the markets to buy and sell no end of things.) The Federation imposed a temporary military government backed by a battalion of troops from the Rigellian National Guard. Over a period of a decade, a democratic government was created, backed by Rigellian military police. The first elections were held in Y115, but the Federation had to maintain a firm grip on the town until Y145, when it was declared "fully self-governing."

The "planetary government" is rather unique. With so many independent communities on the planet, the Federation advisors helped create a "planetary council" in Y106. This body was to discuss and resolve any issues between the different entites, and to represent the planet to the Federation. The Federation appointed a Mantorese politician as the "planetary governor" and gave him access to the funds that resulted from the two Orion-owned mines that had been seized by the Federation marshals. (Those two mines continue to pay royalties to the planetary council, which provides its funding.) His administration was so successful that he was re-elected in the first planet-wide elections in Y120 and remained in that post until he retired in Y129. His successor was another Mantorese politician, one of several who emigrated to Tafelland to work for the new "government." Over the years since that time, the post has been held by people who were born on Tafelland, including ethnic Rigellians, Humans, and Cygnans.

Society: Donjebruche has an open and cosmopolitan culture. Groenveldt has a very "small town" culture, and does not welcome outside visitors without prior permission (and not without good reason). The mines have typical "company town" cultures, all of them different, but all of them the same in most ways.

Economy: All of the entities have a standard Federation economy with a free market.

Laws: Each community administers its own business and all use Federation colonial law, plus local ordinances and regulations as appropriate.

Religion: There is no specific religion for most of the planet, and those who brought their religion with them variously kept it, changed it, or dropped it over time. There are active churches of two dozen faiths, and the pastors of the various churches often work together on social programs or community celebrations. Virtually everyone in Groenveldt is Christian, although of a unique denomination.

V. DONJEBRUCHE TRADING POST

This is a town of 10,000 people, virtually all of them humanoid and virtually all of them able to speak Federation Standard. It has a spaceport, a working civic government and police force (crime is low), and a booming marketplace. The food from Groenveldt feeds the entire planet (through Donjebruche markets) as well as the various asteroid mining colonies, the mining colonies on the moons of Blauw, and any visiting spaceships. A distillery in Groenveldt provides many different spirits to tempt the pallets of Klingons, Kzintis, and others alike.

A typical spaceport town, Donjebruche offers all forms of entertainment for those tired of being cooped up on a spaceship and eager to blow off some steam. There are theaters with family movies and theaters with more sophisticated (or downright raunchy) offerings. There is a "red light district" (with medical and police controls). The spaceport has limited facilities to repair damaged ships. There is a casino (although Federation law limits how much money anyone can lose in a given period of time.) There are factories that turn locally mined metals (and gems) into exportable manufacturered items. There are endless bars and restaurants, and there are limited areas where the local police allow fights to break out and run their course before locking people up for the night.

To Boldly Go:
Things to do in the Federation

Sherman's Planet: Your Team has been sent to Sherman's Planet. Star Fleet Intelligence is certain that the Klingons are making another attempt to destabilize the colony, but no one knows what this attempt will be. Additionally, rumors persist that Orion operatives have infiltrated the colonial government, although whether they are working with (or against, or separately from) the Klingons or not is unknown. Due to this uncertainty, you are going to the planet undercover, posing as a mining (or agricultural) survey team (or under some other cover story of your choosing). The small Star Fleet Marine garrison will provide you with equipment and support if necessary, but the National Guard troops that make up the bulk of the planetary defenses (and the colonial administration) are unaware of your real identity or mission. Get there, find out what the Klingons and/or Orions are up to, and stop it.

The Reluctant Diplomat: The General War is raging. The Klingons have occupied Arcturia, a Federation member world, and have assigned an officer named Kezlok as liaison between the occupation government and the Arcturian people. From the Klingon perspective, Kezlok is an ideal choice: before the war, he helped save Arcturia from an attack by an extragalactic invader, earning a reputation as a hero among Arcturians. He is also highly intelligent and diplomatic. He is depressed that he isn't on a starship fighting Star Fleet, but he has been assigned this duty and even he knows that the Empire could have made no better choice. This makes him very dangerous: from your point of view as a leader of a team sent to support the small Arcturian resistance movement, Kezlok's velvet glove will be more troublesome than the ESS's iron fist. Can you find a way to infiltrate the security surrounding Kezlok and assassinate him, to provoke a reprisal that will shake the population out of their torpor?

The Missing Children: Several Andorian children have recently been kidnapped from Sentos IV, an Andorian mining colony near the Romulan Neutral Zone. The local constabulary is baffled, running up against nothing but dead ends, and have called in the Federation Police to assist with the investigation. Curiously, a tramp freighter making a run into the system last week saw an unidentified ship leaving orbit and cloaking, about the same time as two of the children disappeared. Andor's representative on the Federation Council is very interested in the case: his brother is the colonial governor, adding political pressure to the situation. Could the disappearances have a Romulan or Orion connection, or is this just a coincidence? Your police investigation unit has been sent in to find out. (Alternatively, your team could be anything from freelance military to investigative journalists to a team from the Galactic Intelligence Agency or a Prime Team. You could even be just a group of adventurers who are after the reward money for cracking the case.)

Explore a Strange New World: There are thousands of planets out there just waiting to be discovered, explored, studied . . . or exploited. Go find one and look around. You could be a Pioneer Team sent out by the Weygand-Yulani Corporation, or a freelance group of adventurers hoping to sell your report to a corporation or government. It's a routine mission . . . certainly nothing can go wrong.

A World to Win: You and your associates have found a nice little out-of-the-way Class-M planet off the beaten path. It's time to settle down now, start your own colony, and discover if your social and political ideals will work as well in practice as they do in theory. You are tired of serving others and obeying the rules and regulations of Federation society. Create the society of your dreams! Will it be a free-love commune, a profit-driven corporation, a socialist utopia, or a militaristic Sparta? Just remember: this is your home now, and Star Fleet is not just a communicator call away. Building a society from scratch may not be as easy as you thought, not when you're responsible for keeping everyone fed and healthy. Can you tame a world?

Heavy Lies the Crown: Meria, a planet with high technology in the Federation-Klingon Neutral Zone, has a new leader: the young monarch Azaz. He has taken the throne following the death of his father. Meria is strategically located and has relatively high technology, but has maintained neutrality for the last 50 years. The new king is weighing his options: remain nonaligned (as his political advisors propose), ally with the Klingons (as his military advisors wish), or ally with the Federation (as his economic advisors suggest). The diplomatic corps has sent you and your negotiating team aboard a government fast transport to present the Federation's side of the issue. However, the Klingon D7N diplomatic cruiser *Overlord* has just arrived, bearing the renowned imperial paladin and skilled negotiator Kohlan Vorst Natak to plead the Empire's case. Do you have any hope to convince the young and impressionable monarch that the Federation's way is the best way? The starship *Wasp* is nearby if you need additional resources to demonstrate the Federation's power, but beware of sparking a confrontation with the Klingons.

The Demon in the Shadows: The General War is raging. You are a Klingon ESS team that "trouble-shoots" difficult problems in occupied Federation space. Your latest assignment is Marko V, a mining planet rich in minerals but abandoned by the Federation as imperial forces approached. The mine is back in operation, serving the Empire, but Cromarg workers report a mysterious something lurking in the corridors and tunnels. Three miners and four guards have died in the last week, drained of their blood. Despite the best persuasive efforts of the ESS, the miners are refusing to work until the monster is caught. Better the agonizer booth than death, they say. Is there really a "vampire" in the deep tunnels, or are Federation commandos trying to create panic and fear?

New Life and New Civilizations: An automated probe has reported evidence of an industrialized, humanoid civilization in a newly explored star system. Old-style radio and television transmissions intercepted by the probe show that the inhabitants, who call themselves Serrans, have technology approximately equivalent to mid-21st century Earth, and have begun exploring their system with primitive spacecraft. Is this new species on the verge of developing warp drive? Are the Serrans a candidate for First Contact? Or should they be placed under Prime Directive protection? The Federation Council wants to know, and they've dispatched your team to find out. A small starship will remain out of sight but nearby to provide support.

Harvest of Fear: An Orion informant with links to the Penzance Cartel claims that the rival Pharaoh Cartel is selling kidnapped humanoids to the Tholians. Many Orion groups traffic in forced labor for their own purposes, and the Tholians are known to use humanoid slaves. The erratic informant later claims that some of the victims are being sold for purposes of organ harvesting and medical experimentation, and that a horrified Penzance leadership wants Pharaoh stopped before an outraged Federation launches a massive crackdown. The Federation Police are suspicious of this informant for various reasons (some think he made the whole story up, others think that Penzance wants Star Fleet to go after one of their rivals), but there's just enough plausible detail in the report that this claim must be investigated. Your Federation marshal team has been assigned to the case. Where does it lead? Is the informant lying? If so, for what purpose? And if he is telling the truth, what sort of vile activity are the Tholians (or someone else?) engaged in? And are the motives of the Penzance Cartel as pure as they claim?

Buy, Sell, and Trade: Tensions have relaxed, and détente has been established between the Federation and the Romulan Empire. You are a group of Romulan traders, sent by your Great House to find new sources of kivas and trillium within the Federation to import back home. What other goods can you find that will be of use to the Empire? The freedom of the Federation can certainly be exploited for purposes of industrial or military espionage, or perhaps that freedom could seduce members of your team?

Things to Sell in the Federation

Romulan Ale: Categorized as a controlled narcotic in Federation space, Romulan ale is an extremely potent drink: most non-vulcanoids become highly intoxicated after only a few sips. In humans and most other species, long-term use of Romulan ale is strongly linked with liver failure and stomach cancer. Although illegal to purchase or sell, possession of the beverage is actually rather common. Smuggling is rife, and absolute prohibition has been impossible to enforce. Police forces in many jurisdictions "look the other way" where ale possession and underground sales are concerned, although anyone selling the drink openly will be shut down. While many citizens of the Federation have tasted this beverage, the supply is limited enough that only the wealthy can actually get addicted.

Klingon Aphrodisiacs: Most cultures have urban legends or myths about herbs, drugs, or other substances that boost sexual desire. Few of these have any basis in reality, but one that does is K-rlhnan-ak-Toq'na, an herb family native to Klinshai and known in Federation space as "Klingon aphrodisiacs." The ground leaves of these plants produce a very strong boost in sexual desire for many species, including humans. A single one-gram dose will provide a virtually irresistible surge of lust for two hours. While this would seem to have obvious recreational benefits, the herb has no detectable flavor. As a result, unscrupulous individuals are known to give doses to unsuspecting victims, hidden in food or drink, making it a potent date-rape drug. As a result, most Federation planets have banned the import of the herb. Naturally, there is a thriving black market.

Trivideo Recordings: During times of peace, art, literature, and trivideos are commonly traded and transmitted across borders, although both the Klingons and Romulans make efforts to stamp out (or at least edit) those creations which are ideologically suspect. During the General War, however, the normal methods of transmission and communication were shut down. Nevertheless, there was a market within Federation space for the newest entertainments created by their enemies, with works of music (Romulan symphonies, Klingon operas) being especially popular. One interesting non-musical example was a trivideo program called *Kogan's Heroes Of Prison Planet 26.* This was a Klingon "sit-com," considered *avante-guarde* by Klingon standards, broadcast only at 2 a.m. Tenthday mornings on Klingon Entertainment and Enlightenment Network. The series revolved around Kolonel Kogan of the Imperial Marines, leading a group of saboteurs operating out of a Federation prisoner-of-war camp, right under the noses of the incompetent Human camp commander and his toady Andorian first sergeant. In Klingon eyes, the show satirized Federation hypocrisy and cowardice, while showing the bravery and forthrightness of Klingon troops in the face of adversity. While not all Federation audiences understood Klingon "humor," enough did to make the series sought-after by collectors on the trivideo market.

Things to Buy in the Federation

Rigellian Ferrets: Probably the most popular domesticated animal in the known galaxy, the Rigellian ferret is a small predatory mammal resembling a cross between the cats and ferrets of Earth, although they are native to Rigel and are not related to either Terran species. They are highly intelligent, easily trained, and have robust immune systems extremely adaptable to new environments. Although all normal Rigellian ferrets are about the size of a miniature dachshund dog, breeders have developed a wide variety of breeds with differing coats, with variations in fur texture and color. Rigellian ferrets are popular everywhere in the galaxy as pets, including in Klingon and Romulan space. Unfortunately, on some planets populations of stray animals have gone feral, providing fierce competition for local species in the "small predator" ecological niche.

Terran Parsley: On Earth, parsley is used as an innocuous garnish and herb. However, the plant has a severe intoxicating effect on Kzintis, Lyrans, and related species of sentient felines, acting as a powerful and addictive hallucinogen, like a super-strong form of catnip. Interestingly, actual Terran catnip has no effect on any species besides Terran cats. Parsley is illegal to possess and sell in both the Kzinti Hegemony and Lyran Empire; naturally there is a large underground traffic in smuggling the illegal herb, with Orion Pirate cartels dominating the business. Buying parsley on a Federation planet is easy; successfully smuggling it into Kzinti or Lyran space presents a more difficult, if profitable, challenge.

Books, Young Man, Books: Every civilization produces books in one form or another (or in several forms) and every civilization has collectors who love to be surrounded by old books (even if they have never read them, or cannot read them). Any port of call will have a bookstore (with currently published popular titles) but to find rare old books you're going to have to go into the nearby city, look things up in the local business directory, and visit quaint old shops run by curious old men with thick glasses. But you have to know the trade, or you may find yourself paying top dollar for some common book. On the other hand, there are collectors on your home planet who will pay decent money for *any* book that is a few hundred years old, no matter where it's from or what it's about.

Arcturian Soul Stones: No matter what their philosophical beliefs, most Arcturians carry a "soul stone" on their person at all times. This is a small thermo-chromic crystal, usually in the shape of an octahedron, which the bearer can use as a focus for concentration, meditation, or simple relaxation. (It's also fun to show drinking buddies what happens when you squeeze it, or see a pretty girl, or try a new kind of adult beverage.) The crystals are sensitive to both magnetic fields and temperature changes from contact with humanoid skin, displaying different colors depending on conditions. Some Arcturians use their soul stones as a biofeedback catalyst for controlling breathing and body temperature. Other species, including Vulcans and even Romulans, have found the stones useful for the same purpose. There is a large market in mass-produced, cheap-quality soul stones, but Arcturians and serious collectors from other species prefer more expensive, hand-crafted examples.

Andorian Fleece: A common fabric on one planet may be an exotic luxury item on another. Case in point: Andorian fleece, made from the fur of the Latha, a herd animal native to Andor. As common on modern Andor as cotton clothing was on 21st-century Earth, Andorian fleece fetches a high price on other worlds. The fleece made from latha fur is soft to the touch, very warm, lightweight, water-repellent, and easy to tailor and dye. However, latha are highly adapted to life on their homeworld; they almost never survive on other planets. As a result, the only source for this fabric is Andor itself, making the trade in fleece highly profitable. Klingon nobility is known to pay a high price for Andorian fleece, and Klingon officers were known to favor coats of this material (dyed black or gray) while on duty on occupied Federation planets.

Prellarian Gravity Toys: Prellarians are the Federation's experts in anti-gravity technology, due to their long experience with sigma-positronium. This has untold practical applications, but one "fun" item with a wide following are gravity toys, i.e., small toys with tiny anti-gravity generators inside. Although all warp-capable species have the technology to create such devices, the Prellarian examples have the best workmanship in the known galaxy. The Tatxhi Toy Company in particular was famous for producing a series of remote-controlled flying antigravity toys crafted in the shapes of Federation starships. Many Federation children used such toys to recreate the adventures of their trivideo heroes.

Old Iron: Every society produces weapons, beginning with knives, swords, and the like, and every society has retired (or active duty, or wannabe) soldiers who like having a few old knives or swords or spears or such things around their home or office. You can buy discarded edged weapons at junk stores, or real antiques and collectible weapons at high-priced tourist traps. (Of course, you can also buy worthless junk at high-priced tourist traps if you're not careful.) Such old weapons can be traded (or given as bribes) to the military personel of any world you visit. Even better, your tricorder can tell you if something is 2200-year-old bronze or a just-replicated knock-off, and your ship's database can give you no end of actual information about such weapons. You're not going to make a living moving crates of old knives from one planet to another, but when conducting your real business, you can pick up a few such things on one planet and find someone interested in paying several times what you paid for them at a future port of call, just because they have never had a chance to travel to other worlds and buy such things for themselves. Sometimes, old weapons come with legends or curses or just good stories of warriors and battles from the dim past.

Mysteries of the Federation

The galaxy is a mysterious place, and in the two centuries since the foundation of the Federation, many puzzling phenomena have been encountered. Every strange new world has its own secrets, of course. At best, these are wonders to charge the imagination and make one sing with joy at the majesty of creation. The Pleasure Auroras of Alnus Prime, the Dragons of Berengaria, and the Sentient Sea Jewels of Pacifica are three good examples of "pleasant" mysteries, at least by humanoid standards, puzzles which had baffling beginnings but ended well once the mystery was solved.

But the galaxy also harbors dark dangers. The carnivorous nightbloats of Astralan, the ship-crushing Antares Maelstrom, and the Wasp People of Vereb IV (who seek live, conscious humanoids as food for their larvae) are three examples of baffling phenomena that chill the soul and make the heartiest adventurers cower in fear, even after the mysteries were properly understood scientifically.

Some mysteries have proven more difficult to solve than others. Here are some of the odder phenomena for which Federation scientists have long sought answers. Perhaps your team can find them.

The Analogue Worlds

In a loose sense, most Class-M worlds are "parallel" worlds in that their climates are similar enough for a humanoid to breathe unaided, walk around without a space suit (but perhaps with a parka), and probably find enough food and water to sustain life. By definition, Class-M worlds have oceans and land masses, the air is breathable, and the biospheres rather similar to Earth or Alpha Centauri. Most Class-M planets look something like Earth from orbit, even if the shape of the land masses and oceans is much different.

But some planets are more similar than others, and to these worlds specific labels are applied. A few planets, much more similar to each other than the laws of chance would seem to account for, are formally recognized as "parallel worlds" by astrogeographers. By definition, a parallel world is one where the mass, size, atmosphere, material composition, and proportion of land to water on the planet are virtually identical, (i.e., less than 1% variation) to another known planet not in the same solar system. In Federation space, parallel worlds extremely similar to Earth, Andor, Vulcan, Alpha Centauri, and Arcturia have been discovered. Note that a parallel world can have rather different geography and topography and still be rated as a parallel, as long as the proportion of land to water is the same.

A very small number of such "parallel worlds" are so nearly identical as to be rated as "analogue worlds." An analogue world is an extreme example of a parallel. The same criteria are applied, except analogue worlds are also extremely similar to each other geographically: land masses and oceans are virtually identical in shape, obviously the work of some higher power (as coincidence is just too impossible). Not just the substance of the worlds is parallel, but the form as well. Morkedia III, for example, is a Federation world with analogues in Romulan and Kzinti space. Analogue worlds for Earth, Tellar, Orion, Klinshai, and Brecon have also been discovered in Federation space. Parallel and analogue worlds are sometimes inhabited, but more often not. In a small number of cases, such worlds seem to have been "seeded" by a precursor species; see below for more details.

The mystery is this: how did such worlds come to be? While the existence of a few dozen "parallel" worlds with a galaxy of billions of planets seems (barely) plausible as a result of random chance, no natural phenomenon seems to account for the virtually identical analogue planets. Did some immensely powerful ancient species terraform these planets, or otherwise ensure that they would develop in this way? No one knows.

The Ubiquity of Humanoid Life

The vast majority of planets which have native life do not develop sentient species. Most planets habitable for carbon-based life host a variety of microbial species, plants, insects, aquatic life, and perhaps lower animal forms. A few even reach middle forms such as wolves, apes, or raptorial birds. Complex and intelligent, but non-sapient, animals are somewhat uncommon, and sapient life forms (able to change their world) are the rarest of all. Even so, if only 0.1% of Class-L/M/N planets develop sapient life forms, this still results in the existence of hundreds of sapient species within the territory of the Federation. Most of these species are not technologically advanced and fall under the protection of the Prime Directive.

On Class-M planets with native sapient life, bipedal humanoid life forms acting as superpredators at the top of the food chain tend to be a rather common evolutionary outcome. Many of these species are biochemically similar to humans, though most are not directly related to humans genetically and evolved separately on their homeworlds. The point is not that humanity is something special, but rather that humanoids are actually *not* particularly special, at least as physical specimens. Similar planets tend to evolve similar forms of life, from bacteria all the way to bipedal sentient or sapient primates, according to this viewpoint.

Many scientists accept this naturalistic explanation, but others do not. Some believe that all humanoid life, even those not directly related to each other, show evidence of having been the result of DNA manipulation going back billions of years. This is a separate mystery from the undoubted "seeding" of species which has occurred in the Milky Way.

The Seeders

It is an undisputed fact that about 100,000 years ago, populations of primitive humans were taken from Earth and "seeded" on distant worlds. Genetic studies conclusively show that Alpha-Centaurans, Rigellians, Deians, and several other species including Omegans, Eminians, Zurcians, and Miranites are genetically descended from transplanted populations of early Homo sapiens dating back to this pe-

riod of time. Other humanoid populations might be related. Who or what was responsible for this seeding is unknown. It could have been part of an experiment: scientists note that several of the planets "seeded" in this manner (notably Rigel) had environmental conditions rather different than Earth. Perhaps the seeders wanted to watch evolution in action.

It is also noted that at least two Earth close parallel worlds and one Earth direct analogue world were also seeded with humans at the same time. The populations of two of those worlds eventually destroyed themselves during techno-social maturation crises; the third was at TL6-7, politically stable but unsuited for First Contact, when first surveyed in Y156. Scientists note that these seeded planets developed strong cultural similarities to the "real" Earth, a gigantic mystery that strongly hints of outside interference, although by whom it is impossible to say.

Earth humans were not the only species "seeded" in this manner: Andorians were seeded on Antares at about the same time. Another group of Andorians was seeded on a world in sector 3305, but wiped themselves out through biological warfare about the year -Y450. Evidence strongly hints that Cygnans and Tellarites are also transplants from other worlds, although from where is unclear: they are apparently not directly related to Humans. Vulcans are probably not originally native to their homeworld, but in their case the "transplant" goes back at least 500,000 years.

This "seeding" is not unique to humanoids. The "Leopard Kings" seeded a carnivorous species on several planets about 150,000 years ago, and that root species evolved into the distinctly different (and mutually antagonistic) Kzinti, Lyran, Carnivon, and Jwarundil species.

The "Lizard Kings" transplanted the Gorns to their three homeworlds (as well as at least two others) about 13,500 years ago. One of these became the very different Paravians. The Gerlunians were seeded (from proto-Gorn stock) at a much earlier point.

The "Spirit Kings" helped the Hydrans into space centuries before the "Old Kings" helped the Klingons get there, but apparently did not transplant Hydrans anywhere.

Who or what did this transplanting, and for what reason, is one of the biggest mysteries facing Federation scientists. There may have been different groups of such "seeders," operating with different agendas. No one knows.

The Preservers

Between -Y3000 and -Y300, a starfaring species called the Preservers began a transplant program, rescuing examples of ethnic or social groups in danger of extinction and settling them on new worlds. Some human cultural groups were "preserved" in this way: examples have also been found of Andorian, Orion, Tellarite, and Brecon ethnic groups being transplanted in this manner. In all cases, the groups in question were in danger of being destroyed or wiped out by natural calamities or competition with stronger societies on their own homeworld. Most of the "preserved" groups still live at relatively primitive technological levels and are under Prime Directive protection on their current worlds.

It is uncertain whether the Preservers were motivated by scientific curiosity, altruism, a combination of the two factors, or some other impulse. Most scientists believe that the Preservers were not the same group as the "Seeders." They were definitely not the Old Kings. They may, or may not, have been the same species known to the Cygnans as the Sky Fathers. Preserver artifacts have been discovered on some worlds and their language has been partially deciphered, but no direct contacts have occurred. It is unknown if they still exist in the Federation, operating clandestinely perhaps, or if they have been destroyed or otherwise became extinct, or if they simply moved elsewhere in the galaxy (or in some other galaxy).

The Old Kings

The Old Kings dominated most of what is now the Klingon Empire, and the "western" two-thirds of the Federation, from about the year -Y500 through -Y25. A bit more is known about the Old Kings compared to the other "precursor" species, due to the fact that the Old Kings employed Klingons and other species (but not Humans from Earth) as "subject" or "worker races." The Old Kings were very careful, however, in what they told the less advanced species, and surprisingly little is known about them.

No one is sure exactly where the Old Kings came from. Their "capital" was probably located somewhere in what is now the Klingon Empire or the Federation, but the precise coordinates are unknown, and this was possibly not their true homeworld. The Old Kings were relatively peaceful, in that they preferred trade and diplomacy to conquest, but they were rather "alien" in their attitudes and were often not particularly friendly. Some species report that the Old Kings tutored them in higher technology and treated them well, while others believe that the Old Kings exploited them and treated them as definite inferiors. Some of the Old Kings reportedly engaged in medical experimentation on Subject Races, but this was not particularly common. There may have been more than one Old King faction, some more exploitive than others.

The Sol/Alpha Centauri/Vulcan neighborhood was on the outer edges of Old King territory. It is known that an Old King outpost was maintained at Zeta Reticuli, relatively near the Sol system. There were limited economic and diplomatic contacts with the Vulcans, but the Vulcans never learned much about the background of the Old Kings, who were reticent to share much. Descriptions of their appearances vary, but they do bear some resemblance to the stereotypical "grey aliens" of Earth's UFO lore. It is suspected that they had conducted surveys on Earth for centuries, although it has never been conclusively proven that they contacted Earth governments directly. Officially, no Old King artifacts have been found on Earth, although conspiracy theorists (and a few legitimate researchers) dispute this (and many search for such artifacts). Millions of cheap books are sold every year describing the evidence for the "Old Kings" having been on Earth.

Where the Old Kings went after they vanished is not known. Officially, no one has seen an Old King since -Y25, although occasionally rumors will crop up that the Old Kings

have returned, or a derelict Old King spacecraft has been recovered, or that the GIA has captured an Old King and is keeping the being (and others) in a secret facility somewhere. Old King artifacts are occasionally found, and any planet bearing signs of Old King presence is usually placed under research quarantine.

OTHER MYSTERIES

There are many other mysteries in the ***Star Fleet Universe,*** some of which are briefly mentioned in the ***GURPS Prime Directive Core Rulebook.*** Psychic abilities are fairly rare; the Vulcans are one of few species with a fairly high percentage of people who have such abilities. Romulan and Gorn space (and most of the Inter-Stellar Concordium) is virtually empty. (The Romulans moved there from Vulcan, the Gorns were transplanted by the Lizard Kings, and all five ISC member worlds are in one very small area but are in fact native populations that evolved on those five planets.) Intergalactic ships (the Planet Killers, Juggernauts, Death Probes, and others) appear from time to time without a clear answer to the question of their origins. At least one Federation planet (in fact, the entire star system) disappeared in an instant (Aurora in Y130). The enigmatic "Masters" were known to "kidnap" entire starships, then force them to fight duels in a space "arena" for reasons that are not well understood. And of course, nobody really knows just what an "Andromedan" is other than the fact that their ships originate in the M31 Galaxy (which is in the general direction of the section of the sky that Human astronomers assign to the constellation Andromeda).

Even more mysteries will be presented in future products, such as the planned ***Final Frontier*** series.

JOIN US ON FACEBOOK

ADB, Inc.'s page on Facebook is now up and running, and we're finding a lot of new faces who haven't been around the BBS or Forum. We have pictures up of ADB, Inc. staff, links to many of our videos, snippets of information, and interaction with our fans. Jean Sexton is the main voice you will hear on our page on Facebook. If she doesn't know an answer, she'll ask one of the Steves and ferry the answer back.

All that is left is for you to "like" the page for Amarillo Design Bureau, Inc. if you haven't done so already. Here's the link or there is a link on the website front page:

http://www.facebook.com/pages/Amarillo-Design-Bureau-Inc/231728653279?ref=mf.

We hope to see you there!

Many people on our page on Facebook have not been on our BBS, so perhaps our new outpost on Facebook will become the place for those who want to keep up with current events without the intense atmosphere (and flood of information) found on the BBS. If you are very busy on a given day, checking our page on Facebook would tell you quickly if something important has been announced.

The page also has its own art galleries, plus a place where you can post a review of our products.

Notes to GMs

The Federation in this book is based on ***The Original Series*** rather than the utopian world seen in ***The Next Generation.*** You can feel free to use whatever parts of this you like for a TNG-based campaign, but our contract doesn't cover that era, so we can't help you.

Don't expect us to force you to use our "vision," and feel free to explore your own. You are more than welcome to use anything you read in a fanzine or novel or anywhere else if you like, just don't submit it for publication because we don't want to accidentally violate somebody else's copyrights without realizing it.

The ***GURPS Prime Directive Core Rulebook*** includes more information about the Federation and about the ***Star Fleet Universe*** in general, and our ***Klingon*** and ***Romulan*** books can also provide a wealth of storybuilding ideas.

Of course, a good GM can find usable material anywhere. Virtually any non-magical RPG manual can be used to populate a world, and no end of science fiction-based sourcebooks can provide weapons, equipment, technology, and other items that could decorate an alien world or an extinct civilization. Any science fiction book or movie can be a source for characters, adventures, or new worlds.

This is the ***Star Fleet Universe,*** not simply *Star Trek*. When we created this universe, we reviewed the available source data. We used some ideas, ignored others, and when we found multiple original sources in conflict, we picked the most logical interpretation. If you have a different one, feel free to use it.

We tried to stick to each of the original game engines we use, but in some cases had to make changes or tweaks to fit ***SFU*** history and technology, for example the slightly revised Technology Levels. You're going to have to forgive us as there is a host of existing material about *Star Trek* and the ***Star Fleet Universe*** we had to account for. The generic background of a given game engine may put "electronic teleportation" at a different point in its timeline, but we must assume that any gamer who wants to play in this universe wants to use this universe's timeline.

ARTISTS

Alvin Belflower: 46, 52, 55, 60, 66, 73, 75, 77, 79, 85, 87, 89.
Dennis Calero: cover.
Dan Carroll: 17, 58, 81, 86, 93, 94, 138, 108.
Stephen V. Cole: 39, 41, 110, 117.
Loren Knight: 71, 113, 116.
Dale McKee: 1, 3, 7, 9, 11, 83.
Ted Geibel: planet drawings, 132.
Jim McGonigle: 21.
Adam Turner: 24, 27, 68, 106, 109, 111, 118, 119.
NASA: photo of Earth on 46, photo of Mars on 50.

ADDITIONAL AUTHORS

Jeff Wile wrote the Federation Express article. Hugh Bishop wrote the Andorian background. Loren Knight wrote the armored vehicles article. Andrew Granger wrote "Into the Dark." Stephen V. Cole wrote the military section and Donjebruche article. Randy Green created the Rimworld backstory, which was adapted here.

SAMPLE CHARACTERS

Dr. Kenneth Atchison

210 points

Attributes: ST 10 [0]; DX 10 [0]; IQ 15 [100]; HT 11 [10].
Secondary Characteristics: Dmg 1d-2/1d; BL 20 lbs.; HP 10 [0]; Will 15 [0]; Per 16 [5]; FP 11 [0]; Basic Speed 5.25 [0]; Basic Move 5 [0].
Race: Human; Height: 6'0"; Weight: 150 lbs.; Age: 41; Sex: Male; Graduated: Star Fleet Academy.
Social Background: CF: Federation; TL12.
Languages: Federation Standard (Native) [0].
Advantages: Charisma 3 [15], Courtesy Rank 3 [3], Fit [5], Resistant (Disease) (+3) [3].
Disadvantages: Chummy [-5], Code of Honor (Professional) [-5], Curious (12) [-5], Phobia (Wasps and similar) (12) [-5]; Sense of Duty (Federation) [-10], Stubbornness [-5].
Quirks: Broad-minded [-1], Dislikes political games [-1], Strong sense of right and wrong [-1].
Skills: Administration-16 [4], Anthropology (Human)-17 [12], Archaeology-17 [12], Astrononomy/TL-13 [1], Beam Weapons/TL (Pistol)-11 [2], Biology/TL (Class M)-16 [12], Computer Operation/TL-16 [2], Computer Programming/TL-13 [1], Diplomacy-13 [1], Electronics Operation/TL (Scientific)-16 [4], Electronics Operation/TL (Transporter)-15 [2], Electronics Operation/TL (Tricorder)-16 [4], Electronics Repair/TL (Scientific)-16 [4], Electronics Repair/TL (Transporter)-14 [1], Electronics Repair/TL (Tricorder)-15 [2], Engineer/TL (Auxiliary Systems)-13 [1], Engineer/TL (Electronics)-14 [2], Expert Skill (Xenology)-15 [4], First Aid/TL-15 [1], Free Fall-9 [1], Gambling (Poker)-16 [4]; Hiking-11 [2], History (Recent Federation)-13 [1], Judo-9 [2], Law (Federation Military)-13 [1], Leadership-17 [1] (includes +3 from Charisma), Mathematics/TL (Applied)-13 [1], Mechanic/TL (Auxiliary Systems)-14 [1], Navigation/TL (Space)-15 [2], Operations/TL (Space)-14 [2], Physics/TL-12 [1], Piloting/TL (Aerospace)-10 [1] (default from IQ-6), Piloting/TL (Shuttlecraft)-11 [3] (default from IQ-6), Research/TL-16 [4], Savoir Faire (Military)-15 [1], Shiphandling/TL (Starship)-14 [2], Sociology-14 [0] (from default Anthropology-3), Spacer/TL-15 [1], Strategy (Space)-13 [1], Survival (Desert)-15 [1], Tactics-13 [1], Vacc Suit/TL-9 [1].

Maiah Mo'tharai Atchison

200 points

Attributes: ST 10 [0]; DX 13 [60]; IQ 14 [80]; HT 10 [0].
Secondary Characteristics: Dmg 1d-2/1d; BL 20 lbs.; HP 10 [0]; Will 14 [0]; Per 14 [0]; FP 10 [0]; Basic Speed 5.75 [0]; Basic Move 5 [0].
Race: Alpha-Centauran; Height: 5'6"; Weight: 120 lbs.; Age: 35; Sex: Female.
Social Background: CF: Federation; TL12.
Languages: Alpha-Centauran (Native) [0]; Federation Standard (Accented) [4].
Advantages: Charisma 1 [5], Fit [5], Intuitive Mathematician [5].
Disadvantages: Sense of Duty (Federation) [-10], Stubbornness [-5].
Quirks: Family is disappointed in her [-1], Rebellious nature [-1], Uses Alpha-Centauran phrases regarding men [-1].
Skills: Administration-13 [1], Area Knowledge (Federation Space)-15 [2], Beam Weapons/TL (Pistol)-9 [1], Cartography/TL-16 [6] (default from Geography Class M-2), Climbing-13 [2], Computer Operation/TL-14 [1], Electronics Operation/TL (Scientific)-13 [1], Electronics Operation/TL (Tricorder)-13 [1], Electronics Repair/TL (Scientific)-13 [1], First Aid/TL-14 [1], Gambling (Poker)-13 [1], Geography/TL (Physical, Class M)-16 [12], Geology/TL (Class M)-16 [12], Hiking-10 [2], Mathematics/TL (Surveying)-14 [2] (default from Cartography-3), Meteorology/TL (Class M)-13 [1], Navigation/TL (Land)-15 [4], Prospecting/TL-13 [1], Research/TL-13 [1], Savoir Faire (Academic)-14 [1], Skiing-9 [2], Survival (Mountain)-13 [1], Vacc Suit/TL-12 [1], Writing-13 [1].

Dr. Elur

200 points

Attributes: ST 10 [0]; DX 11 [20]; IQ 15 [100]; HT 10 [0].
Secondary Characteristics: Dmg 1d-2/1d; BL 20 lbs.; HP 10 [0]; Will 17 [10]; Per 20 [25]; FP 10 [0]; Basic Speed 5.25 [0]; Basic Move 5 [0].
Race: Andorian; Height: 6'0"; Weight: 150 lbs.; Age: 41; Sex: Male.
Social Background: CF: Federation; TL12.
Languages: Andorian (Native) [0]; Federation Standard (Native) [6].
Advantages: Common Sense [10], Discriminatory Smell [15], Subsonic Hearing [5], Talent (Healer) 3 [30], Ultrahearing [5], Vibration Sense [10].
Disadvantages: Code of Honor (Professional) [-5], Hidebound [-5], Honesty (12) [-10], Loner (12) [-5], Low Pain Threshold [-10], No Sense of Humor [-10], Pacifism (Self-Defense Only) [-15], Sense of Duty (Federation) [-10], Sense of Duty (Patients) [-5], Vow (Poverty) (Major) [-10].
Skills: Biology/TL (Class M)-13 [2], Biology/TL (Class O)-14 [4], Computer Operation-15 [1], Diagnosis/TL (Andorian)-19 [4] (includes +3 from Healer, defaults from Physician-4), Electronics Operation/TL (Medical)-15 [2], Electronics Operation/TL (Tricorder)-14 [1], Electronics Repair/TL (Medical)-15 [2], First Aid/TL-22 [0] (includes +3 from Healer, defaults from Physician), Meditation-15 [1], Naturalist (Class O)-13 [1], Pharmacy/TL (Herbal)-16 [1] (includes +3 from Healer), Pharmacy/TL (Synthetic)-18 [2] (includes +3 from Healer, defaults from Physician-5), Physician/TL (Andorian)-22 [20] (includes +3 from Healer), Physiology/TL (Andorian)-18 [2] (includes +3 from Healer, defaults from Physician -5), Poisons/TL-16 [0] (defaults from Physician-3), Surgery/TL (Andorian)-18 [4] (includes +3 from Healer, defaults from Physician-5), Survival (Arctic)-19 [1],Vacc Suit/TL-10 [1], Veterinary/TL-17 [0] (includes +3 from Healer, defaults from Physician-5). Dr. Elur has a -1 to medical skills when treating Orions; -2 if treating Vulcans, -5 if treating Humans, Rigellians, or Alpha-Centaurans.

Michiko Soejima

200 points

Attributes: ST 10 [0]; DX 11 [20]; IQ 14 [80]; HT 10 [0].
Secondary Characteristics: Dmg 1d-2/1d; BL 20 lbs.; HP 10 [0]; Will 16 [10]; Per 14 [0]; FP 10 [0]; Basic Speed 5.25 [0]; Basic Move 5 [0].
Race: Human; Height: 5'8"; Weight: 130; Age: 38; Sex: Female; Graduated: Star Fleet Academy.
Social Background: CF: Federation; TL12.
Languages: Federation Standard (Native) [0].
Advantages: Courtesy Rank 3 [3], Fit [5], Indomitable [15], Intuition [15], Reputation (Decorated) (+1) (All the time, Large class) [3], Resistant (Disease) (+3) [3], Talent (Physical Science) 2 [10].
Disadvantages: Code of Honor (Professional) [-5], Curious (12) [-5], Fanaticism (Patriotism) [-15], Sense of Duty (Federation) [-10].
Quirks: Calm personality [-1].
Skills: Administration-13 [1], Astrononomy/TL-14 [1] (includes +2 from Physical Science), Beam Weapons/TL (Pistol)-16 [16], Computer Operation/TL-14 [1], Computer Programing/TL-12 [1], Diplomacy-12 [1], Electronics Operation/TL (Scientific)-15 [4], Electronics Operation/TL (Transporter)-14 [2], Electronics Operation/TL (Tricorder)-14 [2], Electronics Repair/TL (Scientific)-13 [1], Engineer/TL (Electrical)-12 [1], Engineer/TL (Electronics)-12 [1], Engineer/TL (Reactors & Power)-12 [1], Expert Skill (Xenology)-12 [1], First Aid/TL-14 [1], Free Fall-10 [1], Gambling (Poker)-13 [1], Geology/TL (Class M)-15 [2] (includes +2 from Physical Science), History (Recent Federation)-12 [1], Judo-11 [4], Law (Federation Military)-12 [1], Leadership-13 [1], Mathematics/TL (Applied)-12 [1], Mechanic/TL (Reactors & Power)-13 [1], Meteorology/TL (Class M)-16 [2] (includes +2 from Physical Science), Navigation/TL (Space)-14 [2], Operations/TL (Space)-13 [2], Physics/TL-15 [4] (includes +2 from Physical Science), Piloting/TL (Aerospace)-10 [1], Research/TL-13 [1], Savior Faire (Mili-

tary)-14 [1], Shiphandling/TL (Starship)-13 [2], Skiing-9 [2], Spacer/TL-14 [1], Strategy (Space)-12 [1], Survival (Arctic)-13 [1], Survival (Beach/Island)-13 [1], Swimming-10 [1], Tactics-12 [1], Vacc Suit/TL-10 [1].

Gloria Fernandez

200 points

Attributes: ST 13 [30]; DX 10 [0]; IQ 14 [80]; HT 10 [0].
Secondary Characteristics: Dmg 1d/2d-1; BL 34 lbs.; HP 13 [0]; Will 14 [0]; Per 14 [0]; FP 10 [0]; Basic Speed 5 [0]; Basic Move 5 [0].
Race: Human; Height: 5'2"; Weight: 150 lbs.; Age: 45; Sex: Female.
Social Background: CF: Federation; TL12.
Languages: Federation Standard (Native) [0].
Advantages: Acute Taste and Smell 2 [4], Appearance (Attractive) [4], Cultural Adaptability [10], G-Experience (All) [10], Resistant (Disease) (+3) [3], Sensitive [5].
Disadvantages: Chummy [-5], Code of Honor (Professional) [-5], Overweight [-1].
Quirks: Loves talking about spirituality [-1].
Skills: Biology/TL (Class M)-16 [16], Body Language (Human)-14 [2], Computer Operation/TL-14 [1], Cooking-14 [2], Detect Lies-15 [4] (includes +1 from Sensitive), Diplomacy-15 [8], Electronics Operation/TL (Scientific)-15 [4], Electronics Operation/TL (Tricorder)-15 [4], Hiking-9 [1], Naturalist (Class M)-16 [10] (default from Biology-3), Philosophy (Mystic)-13 [2], Psychology (Human)-14 [4] (if in person, add +1 from Sensitive), Research/TL-15 [4], Survival (Plains)-14 [1] (default from Naturalist-3), Survival (Woodlands)-14 [1] (default from Naturalist-3), Theology (Comparative)-12 [1], Vacc Suit-9 [1].

Rema Isabe

201 points

Attributes: ST 11 [10]; DX 14 [80]; IQ 12 [40]; HT 13 [30].
Secondary Characteristics: Dmg 1d-1/1d+1; BL 24 lbs.; HP 11 [0]; Will 12 [0]; Per 12 [0]; FP 13 [0]; Basic Speed 6.75 [0]; Basic Move 6 [0].
Race: Cygnan; Height: 5'8"; Weight: 150 lbs.; Age: 41; Sex: Male; Graduated: Federation Marine Academy.
Social Background: CF: Federation; TL12.
Languages: Cygnan (Native) [0], Federation Standard (Accented) [4].
Advantages: Fearlessness 3 [6], Talent (Mathematical Ability) 1 [10], Resistant (Disease) (+3) [3], Talent (Physical Science) 4 [20], Versatile [5], Very Fit [15].
Disadvantages: Code of Honor (Soldier's) [-10], Gregarious [-10], Guilt Complex [-5], Intolerance (Kzinti) (Total Intolerance) [-10], Light Sleeper [-5], Overconfidence (12) [-5], Reputation (Dishonorable discharge) (-2) (All the time, Large class) [-5], Sense of Duty (Teammates) [-5], Truthfulness (12) [-5], Vow (To follow The Ways of the Fathers) [-15], Weakness (Sunlight 1d/30 minutes; variable -40%) [-9].
Quirks: Doesn't fully support the Prime Directive in all cases [-1], Incompetence (Gambling) [-1], Vow (Clear his name) [-1].
Skills: Administration-11 [1], Armoury/TL (Small Arms)-13 [4], Beam Weapons/TL (Pistol)-16 [4], Beam Weapons/TL (Rifle)-16 [4], Camouflage-14 [4], Climbing-14 [2], Computer Operation/TL-12 [1], Electronics Operation/TL (Communications)-12 [2], Electronics Operation/TL (Tricorder)-11 [1], First Aid/TL-13 [2], Free Fall-13 [1], Gunner/TL (Beams)-14 [1], History (Recent Federation)-10 [1], Karate-13 [2], Knife-15 [2], Law (Federation Military)-10 [1], Leadership-12 [2], Mechanic/TL (Shuttlecraft)-12 [2], Navigation/TL (Land)-11 [1], Operations/TL (Land)-11 [2], Parachuting/TL-14 [1], Running-12 [1], Savoir Faire (Military)-13 [2], Soldier/TL-13 [4], Spacer/TL-13 [1], Stealth-14 [2], Strategy (Land)-10 [1], Survival (Jungle)-11 [1], Survival (Swamp)-11 [1], Swimming-13 [1], Tactics-12 [4], Throwing-14 [2], Tonfa-14 [2], Tracking-11 [1], Vacc Suit/TL-13 [1].

Sarest

200 points

Attributes: ST 12 [20]; DX 10 [0]; IQ 15 [100]; HT 10 [0].
Secondary Characteristics: Dmg 1d-1/1d+2; BL 29 lbs.; HP 12 [0]; Will 15 [0]; Per 15 [0]; FP 10 [0]; Basic Speed 5 [0]; Basic Move 5 [0].
Race: Vulcan; Height: 6'1"; Weight: 145 lbs.; Age: 94; Sex: Male; Graduated: Vulcan Science Academy.
Social Background: CF: Federation; TL12.
Languages: Federation Standard (Accented) [4], Vulcan (Native) [0].
Advantages: Acute Hearing 1 [2], Extended Lifespan 1 [2], G-Experience (All) [10], High Pain Threshold [10], Indomitable [15], Less Sleep 2 [4], Lightning Calculator [2], Mind Shield 4 [16], Nictitating Membrane 1 [1], Photographic Memory [10], Regeneration (Regular: 1HP/Hr) (Only while in Autotrance, -30%) [18], Talent (Physical Science) 2 [10], Talent (Vulcan Psi) 1 [5], Unfazeable [15].
Perk: Autotrance [1].
Disadvantages: Code of Honor (Logical behavior) [-10], Honesty (12) [-10], Intolerance (Emotional or illogical behavior) [-5], Low Empathy [-20], No Sense of Humor [-10], Pacifism (Self-Defense Only) [-15], Truthfulness (12) [-5], Workaholic [-5].
Quirks: Attentive [-1], Doesn't talk much [-1].
Skills: Administration-14 [1], Anthropology (Vulcan)-14 [2], Astronomy/TL-15 [1] (includes +2 from Physical Science), Biology/TL (Class K)-13 [2], Cartography/TL-14 [1], Chemistry/TL-15 [1] (includes +2 from Physical Science), Computer Operation/TL-15 [1], Computer Programming/TL-15 [4], Cooking-14 [1], Electronics Operation/TL (Scientific)-16 [4], Electronics Repair/TL (Scientific)-15 [2], Engineer/TL (Electronics)-14 [2], First Aid/TL-15 [1], Geography/TL (Physical, Class K)-13 [1], Geology/TL (Class K)-15 [1] (includes +2 from Physical Science), Mathematics/TL (Applied)-13 [1], Metallurgy/TL-13 [1], Meteorology/TL (Class K)-16 [1] (includes +2 from Physical Science), Mind Block-14 [1], Naturalist (Class K)-13 [1], Paleontology/TL (Paleozoology)-14 [2], Physics/TL-14 [1] (includes +2 from Physical Science), Piloting/TL (Shuttlecraft)-10 [1] (default from IQ-6), Research/TL-15 [2], Survival (Desert)-14 [1].

Ecirp

200 Points

Attributes: ST 14 [40]; DX 10 [0]; IQ 14 [80]; HT 12 [20].
Secondary Characteristics: Damage 1d/2d; BL 39 lbs.; HP 14 [0]; Will 14 [0]; Per 14 [0]; FP 14 [6]; Basic Speed 5.5 [0]; Basic Move 5 [0].
Race: Rigellian; Height: 6'2"; Weight: 210 lbs.; Age: 34; Sex: Male.
Social Background: CF: Federation; TL12.
Languages: Federation Standard (Native) [6], Rigellian (Native) [0].
Advantages: Combat Reflexes [15], Rapid Healing [5].
Perk: Ultraviolet Tolerance [1].
Disadvantages: Fanaticism (Spread of civilization) [-15], Loner (6) [-10], Odious Personal Habit (Anti-Social) (-2) [-10], Secret (GM's choice: either Rejects Rigellian honor and family or Covert Operative) [-10], Sense of Duty (To family) [-5].
Quirks: Addiction to recfe (mild/legal) [-1], Humble [-1].
Skills: Armoury/TL (Small Arms)-13 [1], Beam Weapons/TL (Pistol)-12 [4], Beam Weapons/TL (Rifle)-12 [4], Biology/TL (Class M)-13 [4], Boxing-11 [4], Camouflage-14 [1], Cartography/TL-13 [1], Climbing-11 [4], Computer Operation/TL-14 [1], Cooking-13 [1], Electronics Operation/TL (Scientific)-14 [2], Electronics Operation/TL (Tricorder)-14 [2], Electronics Repair/TL (Tricorder)-13 [1], Fast Draw (Pistol)-12 [2] (includes +1 from Combat Reflexes), First Aid/TL-14 [1], Hiking-13 [4], Jumping-10 [1], Mathematics/TL (Applied)-12 [1], Meteorology/TL (Class M)-14 [2], Navigation/TL (Land)-15 [4], Observation-15 [4], Physics/TL (Astrophysics)-14 [8], Piloting/TL (Shuttlecraft)-12 [8], Prospecting/TL-14 [2], Stealth-11 [3] (default from IQ-5), Survival (Woodlands)-14 [2], Swimming-12 [1], Tactics-12 [1], Throwing-9 [1], Tracking-14 [2], Traps-13 [1], Wrestling-9 [1].

DESIGNER'S NOTES

This book is a love letter, both to the ***Star Fleet Universe*** and the original source material.

Writing ***Prime Directive Federation*** presented a different set of challenges compared to ***Prime Directive Romulans.*** There was very little material available in the original source material about Romulans, just a couple of episodes. Blending that with established ***SFU*** background and developing Romulan history required creativity, but was a relatively straightforward process.

But writing a sourcebook about the Federation was the exact opposite: there was a much larger mass of material to integrate and explain. ***SFU*** background and fiction was consistent, but some of the television material was self-contradictory. I tried the best I could to blend the two, avoiding violations of ***SFU*** canon, but paying proper homage to the original series while fleshing out "future history" in a logical way.

The Federation itself is a fascinating place. Through the course of 79 episodes, the original TV show established the Federation as a dynamic society devoted to peaceful exploration and the progress of the human spirit, but willing and able to defend itself when necessary. The subsequent franchise shows (beyond our license) presented a more utopian view, but even the original conception was optimistic in tone. While the ***Star Fleet Universe*** as a whole is a more violent place than canon Trek (it has to be; it's a war game), the ***SFU's*** Federation is still the most idealistic and utopian power on the map, grounded in the conception of the original television creators.

As I sat down to write the Federation's background, it was necessary to project future Earth history. In canon Trek, humanity nearly destroyed itself when technology outpaced social advancement, but pulled away from the brink, as the Vulcans had done in their own history. Other species, for example the Talosians in TOS and the Cromargs in ***SFU*** history, were not so lucky. I fleshed out these examples into the "techno-social maturation crisis" concept.

Another issue: how does one design a near-utopia that actually works? The Federation (in the original show and in ***SFU***) is clearly capitalist, yet with a very high standard of living for virtually everyone, and without sharp divisions between rich and poor. It seems to provide the best aspects of both capitalist and socialist economic systems. Is such a thing possible, given the realities of human nature?

High technology obviously helps: problems that are expensive (or impossible) to resolve with 21st-century technology are easily (and cheaply) solvable with the technology of the 23rd and 24th centuries. But I think the key to success is the Federation's access to thousands of uninhabited star systems with enormous resources. In a future with warp drive and easy interstellar travel, a world with six billion people doesn't have to depend on the resources of a single planet to support the economy. As a result, the Federation can provide both a robust social sector as well as dynamic capitalist engine for economic growth. They have found the "sweet spot." That's the theory, anyway. This hybrid economic conception may not fit with the ideals of pure free market-capitalist/libertarian readers on one end of the spectrum, or socialist readers on the other end, but it fits with what we know about the Federation. With lots and lots of money, you *can* have it both ways.

All of that may sound rather dry, but I tried to make the book as fun to read as possible, mixing elements of future history with adventure, humor, and horror.

Filling out the full history of so many member species was impossible given the limitations of space, but we've done enough here to give you a flavor for each world and to provide a basis of expansion for other ***Prime Directive*** products. Also keep in mind that while ***SFU*** is rooted in ***The Original Series,*** canon Trek history and ***SFU*** history diverge after the end of the original show. Look at Trek and ***SFU*** as different-but-related universes, parallel quantum realities if you will.

Stephen V. Cole, Jean Sexton, and Steven P. Petrick deserve particular thanks, along with Loren Knight and Gary Plana. Some of the background was adapted from the original ***Prime Directive*** system developed by Timothy D. Olsen and Mark Costello.

On a personal note, I must thank my ever-patient wife Jeri Sickels and my younger son Jackson. My elder son Nicholas Aaron Sickels provided tremendous assistance, helping develop some of the buy/sell items in particular. This book is dedicated to Nicholas. *– John Sickels*

Acknowledgments

Allow me to take a moment and thank everyone who ever submitted something about the Federation (whether we published it or not) and anyone who just talked about them with me, Jean, or John. All of that factored into what you see here. Gary Plana, Hugh Bishop, Steven Petrick, and many others contributed ideas and articles.

James E. Goodrich, a veteran ***GURPS*** gamer, and Gary Plana, a veteran member of the ***SFU*** staff who is well familiar with ***GURPS***-based rules, provided the rules and character stats for this game engine.

Jean Sexton has been our RPG Line Editor for three years now, and did most of the work pulling this book together. *– Stephen V. Cole, President of ADB, Inc.*

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