

Beyond The Whitherstream

by
David S. Moore

Copyright © 2020 David S. Moore
All Rights Reserved

Chapter 1: Cycles

Thula drifted alongside Hillawarial on the Whitherstream. Its fluid wrapped them both in softness and simplicity. The glee of the young could be heard all around as they swam against the Whitherstream, then abruptly turned and rode with it.

Thula and Hillawarial drifted dreamily on the Whitherstream, diving briefly to the Swelterdepths for an occasional meal of Trallimianalla. There was peace and even solitude at these times, during the Tendertime, when all was tranquil and the Whitherstream was gentle and enfolding.

The Terrortime had come to its end just as it had every season that the Valencriara had endured its fury. It begins with a shudder, and then follow the Terrorstones that fall from above. Some of them strike, killing one or more of the Valencriara. His own father had been lost to the Terrortime, as had Hillawarial's mother. Every cycle they would swim down toward the Swelterdepths in hopes of avoiding the Terrorstones, and every cycle dozens would succumb to their depredations. For more than 22,000 cycles it had been thus. In their long history the Valencriara had endured because they knew the Terrortime would eventually end, and that the Tendertime would again return.

Once again the Whitherstream was placid and protecting. But Thula knew that the Tendertime would again expire. He tunneled to the other Archons— they must begin the Mourningsong to recount their losses and to rejoice in their survival. The Archons tunneled to the others and soon the harmonies of the Mourningsong filled the Whitherstream with jubilation and sorrow. The Valencriara sang of the long sweetness of the Tendertime. They sang of the Trallimianalla that had sustained them throughout all time. And they sang with solemn, somber determination of the Terrortime, and of the many of their valiant number that it had claimed over the immensely long history of their kind.

Chapter 2: Life

Engineer Theresa Mathers stared blankly at her monitor and wondered when the geniuses in charge of this project were finally going to realize that Sector 140459258 was the most boring region of the entire Alpha Quadrant. Sixty-six days she had spent on a tiny research vessel no bigger than a Holo-suite with three of the most aggravating personalities ever assembled in a single crew. Their esteemed leader was none other than Captain Harding-- the absolute quintessence of an Alliance stuffed shirt who thought far too highly of his talents as a research vessel captain.

Actually, she thought him rather cute at first-- that thin little mustache of his and his black hair and dark, dark eyes. She thought he looked rather dashing in a rather grim, determined sort of way. Single, too, she noticed, with more than a little interest. And he did seem so very considerate. He took her to lunch on the second day of their two weeks of briefing on Starbase Nurana.

"You have the most lovely eyes," he said.

For a moment she was too stunned to reply. "Why that's so sweet of you to say!"

"And listen, if you need any help with the material we've been covering in our briefings, I'd be more than happy to render my assistance."

"Well thank you Captain-- that's very thoughtful of you. I will definitely consider it."

For a microsecond, maybe-- but no more. Theresa was absolutely certain that she did not need his assistance with any of the materials. In fact Theresa had excelled at the Alliance Academy. In fact Theresa was an expert on virtually every type of known and unknown phenomena that they might reasonably be expected to encounter on the most boring expedition in Alliance history. No, very certainly she did not need any help from Captain Harding on any of the subjects that had been covered.

Still, she found herself thinking that someone at Alliance Command must have thought he had talent. He was a Lieutenant only six months earlier and now he was to captain this, the Rim Quest, the first of a new type of research vessel on its maiden voyage! And they were to explore uncharted regions of the Rim, the borders of Alliance space. It all seemed so very exciting until, on their first day out, Captain Harding assembled the three of them in the mess hall and informed them that he would be in charge of every aspect of the mission, from setting the course to determining how their research data should be gathered. And true to his word, Harding took every opportunity to foul up the entire mission with his tedious, picayune pronouncements on the proper observation of every minuscule procedure in the entire Alliance rulebook.

It didn't take long for her to transfer her romantic interests back to the mysterious, misunderstood detective Swain whose latest adventure, *Swain Spurned*, had entertained millions from Goridon to Mindos IV. Besides, Harding quickly developed an interest in Vena Tularea, Engineer and obedient sycophant of his every decree-- and most recently an occasional late night visitor to his quarters. Wasn't she just a wee bit jealous of Vena? Well, perhaps. While

Theresa had a good figure and nice features, Vena's figure was outstanding and her face was, well, stunningly beautiful. But that mountain of golden locks piled atop her head could little conceal the barren jaundice of her personality.

Finally there was Troch, the security officer, an impossible Klingon who only seemed able to speak in insults, when he spoke at all. He made her feel very uneasy whenever she was near him. No, it wasn't a latent fear of Klingons. Her grandfather had been killed by Klingons during the border skirmishes of Urtu Thorlan. But she had worked side-by-side with Klingons at the Alliance Academy and had not felt about any of them the way she felt about Troch. There was something ominous, almost sinister about him. His eyes? His beard? She couldn't quite place it. In any case, the crew members all performed their duties well-- but a worse match of personalities could hardly have been assembled.

There were five stars in Sector 140459258, two of which were long-dead white dwarfs. Their planets had been roasted millions of years ago and were now nothing more than charred hulks. One star was a red giant that had already engulfed five of its planets and would probably become a supernova within just a few million years. The fourth star was a hot blue giant-- too young for its 30 planets to have nurtured life.

The last star system, # 2V45903, was a binary system with two main sequence suns, one of about 3 solar masses and the other of less than one half solar mass. Harding quickly deduced that this was the only one of the five star systems in the sector that might have life-- and so he ordered them to scrutinize its every aspect in the most exhaustive detail. But Theresa quickly concluded that they had taken enough readings of all 13 of the barren, boring, and utterly dead planets in the system within the first 10 minutes of entering 2V45903 to convince even that stubborn blockhead Harding that there wasn't anything else worth studying within 10 light years.

"I don't care how tedious and unproductive this mission might seem to you, Mathers," Harding screeched, "but we are going to follow orders and we are going to gather the most impressive array of data ever assembled on any sector and we are going to write the most magnificent report ever submitted to Alliance Planetary Research and we are going to prove ourselves exemplary researchers to Admiral Bramahk. And I will personally kick your butt all the way back to Goridon if you don't gather every last bit of sensory data available in this sector! Got it?"

Theresa gritted her teeth and nodded. "Yes Sir! Got it."

So Mathers proceeded to probe each of the 13 planets with every sensory device their research vessel had.

2V45903 was a perfectly normal binary system with no Class M planets. In fact, the only *unusual* fact about its two yellow stars that they were able to glean in more than two weeks of intensive observation was that the solar wind of the primary yellow star was slightly hotter than one would normally expect. As for their satellites, the innermost 6 planets were each so close to the two suns that average temperatures on any of their surfaces never got below 250 C. The Alpha planet was really nothing more than boiling rock. Its orbit actually took it

between the two stars. At least twice in each revolution about the primary yellow star it would pass near enough to the secondary star that its surface would be literally sheared apart by the tremendous gravitational forces of the two opposing suns. Within a few hours lava flows would immerse the entire surface. This had happened throughout the entire life of the planet. No chance for life there.

They found an enormous mineral wealth on the Gamma planet, and quite an array of gemstone deposits on the Beta planet as well. But even an automated mining facility would never be able to operate on such hellishly hot planets.

A band of asteroids filled the region of the system that could have sustained a Class M planet. Not one of the asteroids was large enough to sustain an atmosphere, and all of them consisted mostly of iron and a few other heavy metals as well as silicon. No water. No carbon. No life.

The outer planets were just Class D planets-- giant balls of frozen gas. Three of them had rings of more than average allure. Two showed signs of water ice on their frozen satellites. All had large quantities of hydrogen and helium.

The largest of these-- the Zeta planet-- showed signs of the usual weather patterns seen on giant gas balls deep in its surface. Winds of several hundreds of kilometers per hour, locally persistent storms, jet stream attenuation at the poles-- all perfectly ordinary stuff. None of her readings on any of the outer planets had shown anything unusual or interesting at all. But Theresa *did* have several terabytes worth of sensory data covering every square meter of each planet to present to Planetary Research when they returned. That should be enough to prove that the crew of the Rim Quest was the most thorough and most diligent research team in the Alliance.

Standard planetary scanning methods employ a general sampling of most frequencies in the electromagnetic spectrum. Standard lifeform scans look for the kinds of signatures that experience had taught were most likely to be found. And standard research methods called for treating these giant gas balls as immense repositories of unfathomable cold and nothing more. So why did Mathers scan the Zeta planet in the very low frequency radio band with a higher sensitivity than was called for in any of the standard manuals? Because she was utterly bored, and because she had already scanned every planet in the system a thousand times with every other known scanning sensor and because she was absolutely dead certain that she wouldn't get anything more than meaningless noise. Maybe if she recorded *enough* noise she could fill their onboard data buffers to overflowing and they'd *have* to go home.

But there was something very strange about the signals she got back. They weren't just noise. There was organization in the signals-- order of a type that seemed to be.. seemed, well... *alive!!* How could that be? The Zeta planet's orbit was some 1600 million kilometers in radius, and the planet was so far from the system's two suns that its atmosphere consisted mostly of hydrogen and helium. And as for the signals, they were coming from a depth of more than 10,000 kilometers! At that depth the pressures would be immense! Frigid temperatures, hydrogen and helium-- but no water, no hydrocarbons-- how could

anything live down there?

But wait— just a moment... What if? What if!! The Zeta planet is immense— much larger than any other planet in the system. So in all likelihood a majority of comets entering the system ultimately collide with the Zeta planet. Hence at greater depth there would be water. And perhaps there would be methane and other hydrocarbons as well, but only at depth, far below the layers of hydrogen and helium.

The planet itself was about 150 thousand kilometers in diameter— so large that it actually radiated heat. So perhaps at a depth of, say, 10,000 kilometers the temperature is high enough to support life. But she wouldn't be able to tell with her instruments there on the ship since the planet's magnetic field made such readings in that part of the spectrum unreliable to depths of greater than about 500 kilometers. And that would also explain why the ship's sensors hadn't reported any signs of life anywhere on the Zeta planet or its satellites. She would have to send a probe.

Chapter 3: Loss

Theresa grew up in Clorinda, the glittering capital of Goridon, which was the first planet settled by the human exiles who later founded the Alliance. It's an Earth-sized planet circling a very ordinary Sun-sized star just beyond the outer perimeter of a globular cluster. Her parents had been among the millions of Federation refugees who journeyed for more than 100 years toward the galaxy's center, fleeing the Dominion War. Goridon seemed idyllic-- a pristine planet that seemed never to have been settled in a region of the galaxy that had little evidence of occupation.

But within a few years, several ancient ruins were found buried in Goridon's dense tropical forests. The ruins bore inscriptions written in a language that was unlike any known to the Federation; and so the ruins stood as a dark reminder that there was much about their new home that the colonists didn't know. More ominous was the later revelation that most of the ruins showed clear evidence of aerial bombardment. Some colonists even suggested that the ghosts of Goridon should be abandoned, that it was too risky to stay on a planet with such an obviously dangerous past.

About a year after the founding of Clorinda, Captain John Korvack led a crew of scientists on a three year mission to contact nearby civilizations. He commanded a vessel that was really just a converted cargo barge named the Regolla Convey 3. Theresa's father Paul served on the mission as Chief Exobiologist. They met a great many merchants and travelers in the region and quickly learned that there were three major empires in the region, none of which were the least bit hospitable to their new neighbors. The Iriscene Empire was known to encompass a region more than 5,000 light years in diameter surrounded by a perimeter of formidable fortresses. The Plarestans were a fierce reptilian race who controlled a rapidly expanding empire of at least 1,000 planetary systems. But of the Q'la'xan Empire little was known, other than that it was ancient, inscrutable, and feared.

In their second year Korvack and his crew explored a sector that was off the main corridors of travel and commerce and came across a star system of 15 planets, the fifth of which was of Class M but smaller than Earth. They assumed a high orbit and surveyed the planet.

They found that there were a great many cities, most of modest size, a considerable population, but oddly concentrated in the tropics. The technology appeared to be quaintly preindustrial. Captain Korvack ordered his first officer, Paul Torrens, to form an away team and transport down.

"But Sir," Torrens objected, "are you sure we should be doing that? They appear to have a very low level of technology. The Prime Directive..."

"The Prime Directive is Starfleet's most sacred commandment" Korvack acknowledged. "But we're not in Starfleet, are we Commander?"

"But Sir," Torrens pleaded.

"Look, Commander, our mission is to seek out new civilizations *and new allies*. We are not bound by the Prime Directive. We're exiles in a foreign part of

the galaxy-- intruders, actually. We need to make friends. Unlike the Federation, we're not established. We need to be more... flexible. More creative."

"Yes Sir," Torrens said with a nod of understanding.

Torrens transported down to the planet with Elizabeth Rose, an exobiologist, Wilson Brast, a security officer, and Theresa's father Greg, the ship's exobiologist. They arrived in what appeared to be a central square in one of the larger cities. Within seconds they heard a high-pitched buzzing sound and saw blurry streaks whirling around them; then abruptly they found themselves surrounded by dozens of small-framed humanoids. They had a uniformly adolescent appearance and were no more than 80% the height of an average human. Their skin was bronze, their eyes were dark and inquiring, and every one of them was completely naked.

Brast instinctively reached for his phaser-- but before he could put his hand on it one of the men seemed for a moment to disappear in a blurry streak, then to reappear moments later standing before them with every instrument and weapon the away team had brought with them-- even their com badges.

They all looked about in astonishment when they realized what had happened. Torrens looked imploringly at Rose.

"Well, Sir," she announced, "it appears that they have a much higher metabolic rate."

"Yes, I see that Rose," Torrens said with evident irritation. "And now that they have our com badges we have no way of talking to them."

"It probably wouldn't help anyway," Rose said. "The Universal Translator isn't configured for speech at their speed."

They could hear a high pitched buzzing all about them. It had to be speech. Torrens put his hands in the air and walked slowly toward them. When he was within a few feet of the man who had taken their weapons he stopped.

"Captain," he said.

"Yes Commander," came Korvack's growl from the Commander's com badge. The man who had taken their equipment picked up the com badge and studied it carefully. "What's your situation?"

"We're surrounded, Captain," he said with a grin that he hoped the people of the planet would interpret as a sign of good will. "And we've been completely disarmed. The people here have a metabolism that is maybe five or ten times faster than ours. One of them zipped around and took every weapon and every device we brought with us, including our com badges. And their speech is equally fast, Sir. All we can hear is a buzz."

"Well, I see you've got things under control then, Commander."

"Yes, Captain, thank you Sir. But we could use some help here, Sir. I wondered if you could configure the Universal Translator to respond to the high speed of their speech."

"Certainly Commander," Korvack replied. "Just a moment."

Several tense moments went by while the away team realized that a larger crowd was gathering around them. Torrens smiled broadly at the gathering

audience. They surveyed the surrounding city and saw that the buildings were all relatively low and were constructed chiefly of wood and brick. They also noticed that many of them appeared to have been recently damaged, apparently by fire. And there were ruins evident in the distance.

“Alright, Commander,” Korvack said moments later. “Try it now.”

“Greetings,” Torrens said with another toothy smile and a slight bow. “We are explorers from Goridon. We seek knowledge and allies. We would like to make your acquaintance.”

“Why do you carry weapons?” came an accusative-- but childlike-- voice, apparently from one of the men closest to them.

“To defend ourselves,” Torrens replied. “But it appears that our weapons are useless against you and your kind.”

“Why should we trust you?”

“We think trust is earned,” Torrens said with more smiles. “And to help in establishing that trust, we would like to propose an exchange.”

“An exchange?”

“An exchange?” came Korvack's growl over the com badge.

“Yes,” Torrens continued, “an exchange of people. We will leave one of our crew members with you here on your planet in your care, and in exchange we would take one of your citizens with us on our ship-- to learn our way of life, our technology, and our values. We would return in, say, 30 days. You would see us as we are, and we would learn more about you.”

“Commander?” Korvack growled again. “An exchange?”

“Just being creative, Sir,” Torrens said cheerily.

“Right,” Korvack grumbled. “Very well, Commander, carry on.”

Theresa's father took a step forward. “I volunteer, Sir,” he said.

“Thanks, Greg. I was hoping you'd be interested. We're going to need someone with your talents.”

There was intense buzzing throughout the crowd. More than a minute passed by. Torrens slowly dropped his hands. At last one man in the crowd stepped forward. He seemed a bit older than most of the others. He stood in front of Commander Torrens and bowed.

“I would be honored to go with you,” he said with a shallow bow. “My name is Jareralan.”

“I am very pleased to meet you, Jareralan. I'm Commander Torrens. This is Greg Mathers,” he said, extending his hand toward Greg. “He'll be staying here on your planet.”

Mathers bowed. “I am honored.”

The away team beamed back up to the Regolla with Jareralan in Officer Mathers's stead. They learned that Jareralan's people called their planet Uralaschi and that they didn't wear clothes because they moved so fast that clothes simply couldn't bear up to the stress of moving at such high velocity.

Commander Torrens took him first to sickbay to see if the Medical Officer

could provide him with some clothes that might be suited to his metabolism.

"This is Dr. Stevenson," Torrens said. "She is going to see if we can find some material for clothing for you."

At first Jareralan objected. He had never worn clothes before, and he certainly didn't want to start now. But the doctor found a material that was very light but strong enough to endure the stresses of Uralaschian running. She had the replicator manufacture a suit from the material just his size that was silvery and skin tight.

"Try this. This suit will keep you warm even in a very cold room. It will make it possible for you to visit parts of the ship that would otherwise be too cold for you."

She held the suit out to him. He looked at it quizzically, touched it, rubbed the material between his fingers, then took it and put it on.

"Why don't you just try to run a short distance in it?" the doctor asked. In an instant a silvery blur zipped around the room and returned to the very spot he had been standing. The doctor was obviously taken aback by this display of Uralaschian prowess. "Well, what do you think?"

"I like it! My people could use this wondrous material! It would enable us to live in regions of our planet that are too cold. Can you give me more to take back to the planet?"

"Perhaps, Jareralan," Torrens replied, "once we get to know one another better."

Next Torrens coordinated Jareralan's introduction to the ship. He showed Jareralan how to use the replicator, the turbolift, the computer, the ship's communication system.

"Amazing!" Jareralan enthused when he learned about the computer. "And it's a machine, you say? But it sounds like a person!"

"Only because it's voice is synthesized," Torrens explained.

"But... But how is it able to answer so many different questions?"

"It's a repository of our knowledge. It knows more about our history, our science, our engineering than any one of us."

"And I can ask it any question I want?"

"Yes," Torrens said, "but there are some questions it won't answer for you. Like questions about ship security, or technology that we haven't agreed to release to you."

"I see," Jareralan said with a bewildered nod.

After Jareralan had lived on the ship for more than a week, Torrens arranged a briefing with some of the staff in a conference room.

"It seemed to us there were several buildings in your city that were burned" Captain Korvack said. "What happened?"

"It's the Plarestans" Jareralan said.

"Plarestans!" Korvack exclaimed. "We've heard about them. What can you tell us?"

"They are a fierce reptilian race," Jareralan replied. "They first appeared on Uralaschi a few weeks ago. They arrived as you did, appearing as if by magic. We had never seen anything like it before. Now I realize that they must have something like your transporter. We have never had visitors from other worlds before. A large crowd gathered around them. We were all very curious. They were armed with many weapons, but we didn't realize what they were. They began to talk to us through devices, as you did. They told us that we were to become part of the Plarestan Empire. We had no idea what that meant. They demanded that we accept their rule. We didn't know what to think. Their leader demanded that we kneel and pay homage. We refused."

"Very courageous," Korvack said with a hearty nod. "We would have done the same."

"Our people have had a long and bloody history," Jareralan said. "We had a three thousand year period of warlords. Projectile weapons-- arrows and slings-- are very ineffective against us unless we are caught by surprise. We move so fast that we can easily evade arrows. So we perfected a form of hand-to-hand combat called *Hara-akeem* that is very deadly. A Hara-akeem warrior can throw a knife so fast that he has an even chance of killing an enemy who moves too fast to be hit with an arrow. For centuries armies of these warriors fought for domination. When a city was conquered, the warlord would demand that everyone in the city swear an oath of allegiance to the conquerer. Those who did not were put to death. But our people are very stubborn and independent. Most would rather die than be subjected. Many entire cities were wiped out."

"That sounds like much of our own ancient history," Elizabeth Rose said with a glowering nod.

"In just the last couple of centuries democracy has become common, but there were still many regional disputes. It has only been very recently that international cooperation has been possible. We now have a Council of Nations that cooperates to resolve conflicts. We now have peace and prosperity as never before. We have international cooperation as never before. But there are still many old and virulent animosities. Today the Uralaschi people do not like to be made subservient to anyone or anything. We value our freedom and our independence. We have no desire to return to the days of repression, whether at the hands of a tyrannical warlord or a paranoid emperor."

"So I take it you didn't comply with the Plarestan demand to capitulate," Korvack said.

"We looked around at each other unsure of what to do," Jareralan replied. "They raised their weapons. One of us may have moved, may have made the Plarestans think we were going to attack them-- but one of them fired into the crowd. The people in the first few rows could see his movements and were able to avoid the blast, but a woman further back couldn't have seen and she didn't move out of the way. She was killed instantly. Suddenly everyone in the crowd rushed the Plarestans. We took their weapons and tore them to pieces."

"I see," Korvack said. "But if you killed them all, how did they destroy the

buildings?”

“Their ship in the sky. It began shooting fire at our cities. It destroyed every building in our city. And since then we have learned that they destroyed virtually every building in every other nearby city too.”

“The crew was probably listening in on the conversation between your people and their away team,” Torrens added. “When they didn't report back, they must have assumed that the away team had been killed.”

“I suspect they'll be back,” Korvack said. “And I'll bet that next time they won't be so polite.”

“We won't be able to fight them if they attack us from their ships,” Jareralan said. “We don't have anything that can combat that kind of technology. Will you help us Captain? Will your people be able to provide us what we need?”

Korvack rubbed his chin. “We're not supposed to provide our technology to other cultures,” he said with a glance at Torrens. “In the past our attempts to help out in circumstances such as yours have had unforeseen consequences. I doubt that our leaders would approve any such proposal.”

Jareralan stood and planted his palms on the table. “Then you are condemning us to servitude!” he said hotly. “You have said it yourself-- when the Plarestans return they will use their ships and their weapons to blast us into submission!”

“I said that we couldn't provide technology, Jareralan,” Korvack said. “But I didn't say that we couldn't help.”

Jareralan sat back down and looked coldly at the others sitting around the table. “What can you do, then?”

“We can offer our support,” Korvack said. “We are new to this region. We are exiles from our own region of the galaxy, and we don't have the resources that are possessed by the Federation. But we can offer a ship.”

Torrens raised one eyebrow and gave the Captain a look of alarm.

“Which ship?” Torrens asked.

“This one,” Korvack said.

“This ship? A cargo ship against an entire contingent of Plarestan fighters and battleships?”

“What can one of your cargo ships do against the Plarestan warships?” Jareralan asked.

“Our ship is equipped chiefly for exploration,” Korvack said. “It doesn't have armaments, and its shields aren't designed for front line defense. But one thing a cargo ship has in abundance is transporters.” Torrens' scowl melted slightly; Jareralan looked perplexed. “I believe we can take out the entire Plarestan assault force before they have time to report to base.”

“How?” Torrens asked with a look of stupefaction. “Are you planning to beam all of the Plarestans back to their home planet?”

“No,” Korvack retorted, “but they'll be back soon. So we'd better start planning.”

“Yeah, you're probably right,” Torrens said. “I'd bet they'll show up in

three or four days. We'll need to be ready for them."

"Jareralan," Korvack said, "I think you and Commander Torrens should return to the planet to recruit a fighting force of your best Hara-akeem warriors. We'll need to be ready for them." He turned to Chief Engineer Daniel Howard. "Danny, we're already two days out from Uralaschi. We'll need to get back there fast."

"Right," Howard replied. "We've been doing warp 5. But we should be able to push warp 8.5. That would get us back to the planet in about... 10 hours."

"It'll have to do," Korvack grumbled. "From what little we have gleaned in talking to merchants and travelers in this region," Korvack said, "the Plarestans can be expected to attack with overwhelming force. Panic and terror are their chief objectives. They will probably attempt to destroy every major city on the planet."

"They probably know that their hand weapons are useless in hand-to-hand combat with the Uralaschi," Torrens said. "So I would say they probably won't attempt an invasion."

Jareralan nodded. "We would tear their soldiers to pieces if they were ever to land an assault force on Uralaschi."

"My guess is that they'll field a fleet of 20 ships," Korvack said, "because that's how many it would take to encircle the planet in the classic dodecahedral assault."

"I agree," Torrens said. "So how do we attack 20 armed Plaretan ships before they can destroy the major cities of the planet?"

Korvack smiled. "Allow me to explain..."

#

When they finally arrived at Uralaschi, Torrens and Jareralan beamed down to the planet and recruited 20 teams of the finest Uralaschi warriors to be trained in the holodeck. Because the metabolism of the Uralaschi was so high, they were able to train all of them in just a few hours.

Torrens directed a team of engineers to deploy terrestrial probes to the frozen surfaces of three of the most desolate moons of the outer planets, and one each to the planet's two moons. And Captain Korvack set the ship down in a cavern on the dark side of the largest moon.

Then they could only wait. It was less than two days later that they received the first signal from one of the probes-- the Plarestans had at last arrived at the outer fringe of the Uralaschi system. When all the ships had decelerated to impulse drive they were able to count them-- 20 ships, exactly as expected.

"They'll be scanning the planet for anything unexpected, especially anything foreign. Daniel," he said to the helmsman Daniel Richards, "on my mark I want you to jump to warp 1 for one and a half seconds."

"Right," came Daniel's response. "We'll be ready sir!"

Korvack ordered the helmsman to lift off.

"But keep her close to the surface," Korvack said. "We don't want to give our position away just yet. We can't move until they begin firing."

The Plarestan ships began to assume the orbits of the dodecahedral assault. The last ship on their side of the planet settled into orbit and moments later they all began to bombard the surface. Korvack called the order.

"Now Daniel!"

The ship jumped in and out of warp drive and appeared instantly within 10,000 kilometers of all the Plarestan ships visible from the dark side of the planet. Commander Torrens monitored the enemy ships from the cargo bay transporter.

"We're in luck!" he reported to Captain Korvack. "All of the Plarestan ships have their shields down. Beaming the teams over now..."

Each of the 10 transporter platforms was filled with two teams consisting of two Uralaschi Hara-akeem warriors and one Regolla engineer. One team was beamed into an alcove in Main Engineering of a separate Plarestan vessel, just inside the security door; the other was beamed onto the bridge. It took mere seconds for the Uralaschi to disarm and knock unconscious every Plarestan in Engineering and on the bridge. They shut down the warp drive, disabled the communications array, secured both Engineering and the bridge, and brought down the shields. Finally they set each ship on a course for the planet's star. In just a few minutes the teams were ready to beam back to the Regolla.

"All teams have returned," Torrens reported. "Time to move!"

"Roger that," Korvack said. "Helm-- Korvack Attack Plan A-- engage!"

"Aye aye Captain!" Daniel said, and he touched an icon on the console to play the pre-programmed attack plan. The ship spun 240 degrees, then lurched to Warp 1 for one tenth of a second, then spun another 240 degrees, then lurched into Warp again.

"Ah, there they are!" Korvack exclaimed.

The remaining ten Plarestan cruisers were now fully visible on the vidscreen. And they were all firing on the planet.

"All right, Torrens-- you're on!" Korvack barked.

"Now beaming the teams to the next 10 ships..." Torrens reported. There was a pause; then "Uh oh. Sir, we have a problem."

Korvack was watching the Plarestan ships on the bridge's vidscreen. One of the ships started to move at impulse speed toward the Regolla.

"I was only able to beam teams aboard seven of the ships, Sir," Torrens said. "The other ships raised their shields."

"Yup, I see," Korvack replied. "One is headed toward us now. Shields up Mr. Donaldson!"

"Captain!" Torrens protested. "If you raise the shields I can't beam the teams back!"

"Not now Commander! Helmsman-- lay in a course..."

But Korvack gaped, then pointed at one of the Uralaschi-controlled Plarestan ships-- it was firing on the warp nacelles of a Plarestan ship! "Who's that? What's he doing?"

"Uh... Smith, I think," Torrens said. "Looks like he's attacking!"

"Yeah, I see that! He's going to get himself blown to bits."

The other two Plarestan ships turned and pounded Smith's ship. But Smith kept on firing, concentrating on the ship's nacelles.

"Helm-- pull us out of range!"

Daniel backed the ship away while Smith kept on firing; but now all three of the Plarestan ships that had not been boarded were converging on Smith.

"They're all firing on him, Captain!" Donaldson, the weapons officer, exclaimed.

A torpedo slammed into the port launch bay of Smith's ship and ripped it open; shattered fighters and shuttles spilled out into space.

"Torrens-- call the other teams! Tell them to raise shields and go on the offensive!"

"Sir-- Smith's shields are down!" Donaldson said. "He's not going to survive another... Uh... wait..."

Smith's ship blinked out of existence... and a massive explosion ripped one of the Plarestan ships in two.

"What happened?" Donaldson gasped.

"Smith jumped to warp," Captain Korvack said with a shrug. "Right through one of the Plarestan ships."

"Only two left, Sir," Donaldson said.

The six remaining Uralaschi-controlled ships moved toward the two Plarestans. Phasers and torpedoes blasted from ship to ship; but the shields held.

"They're not coordinating their attacks," Korvack growled.

One of the Uralashi ships was struck in the starboard side with a heavy barrage from the two Plarestan vessels; the hull ruptured and spewed rubble into space.

"Torrens-- tell them they need to coordinate their attacks!"

The port nacelle of another Uralaschi ship was struck by dual phaser blasts from the two Plarestan controlled ships and was blown apart.

"They're losing it," Korvack murmured.

Another blast disabled a third Uralaschi ship.

"Three on two," Donaldson announced.

Korvack nodded. "Helm-- plot a course for Goridon."

"Goridon, Sir?"

"You can't desert them now, Sir!" Donaldson objected. "The Plarestans will just come back here with a hundred ships and they'll bombard every square centimeter of the planet!"

“What would you have me do?” Korvack shouted. “We have no weapons! Our shields won’t stand up to their weapons! They’re battle-hardened warriors and we’re just explorers! We can’t defend against that!”

Daniel scowled; then nodded. “Setting course for Goridon, Sir.”

“Torrens-- let them know that we’re leaving and beam out as many as you can!”

“Yes Sir.”

Donaldson jumped up from his seat and pointed at the vidscreen. “Sir-- look!”

Korvack turned and saw that two of the Uralaschi ships were facing one of the Plarestan vessels from opposite sides.

“They’re going to ram him!” Donaldson exclaimed.

The two Uralaschi ships jumped to full impulse and slammed into the Plarestan ship. Its shields shuddered, then buckled; the hull splintered; both nacelles blew.

“One ship left!” Donaldson exclaimed.

“Torrens-- tell them to concentrate all firepower on the last ship!”

But before Torrens could respond they could see that the three remaining Uralaschi vessels had all converged on the last Plarestan ship.

“They’re concentrating their firepower on the starboard nacelle,” Donaldson said. “Oh-- a hit!”

A blast ripped through the nacelle and the ship went dark. Another barrage focused on the port nacelle and a moment later it too was torn apart.

“That’s it!” Korvack exclaimed. “Torrens-- send three teams over to those last two ships and let’s get them headed toward the sun!”

“Aye aye Sir!”

A few minutes later Torrens called the bridge. “All teams safely back on board, Sir! Except Smith’s, that is.”

“And all of the Plarestan ships are headed for the planet’s sun,” Donaldson reported.

“Wonderful,” Korvack said. “Torrens-- were you able to beam Smith and his teams back?”

“No Sir. No life signs.”

“Alright, let’s get the Uralaschi back home. Helm-- take us down to the planet.”

#

Captain Korvack was an instant hero. Theresa was just a teen at the time, but she was aware that the story of his victory resounded throughout the Alliance. It was repeated in every broadcast, it was told to every schoolchild-- but it was Engineer Smith who was the real hero that day. Without his sacrifice the others would not have fought as valiantly as they did.

The day after the Regolla’s return Theresa’s mother was just putting dinner on the table at their house on Goridon when their doorbell rang. She

opened it to a woman in an Alliance uniform.

“Good evening Ms. Mathers,” she said. “I’m Captain Olson.”

“Uh, Captain,” her mother stammered, “uh, won’t you come in? We were just sitting down to dinner. Would you care to join us?”

Captain Olson entered but shook her head. “I’m afraid I have some bad news.”

Theresa shuddered.

“It’s your husband Greg,” Olson said. “He’s been killed.”

Her mother put her hand to her mouth and dropped a spatula to the floor.

“Oh no!” she said. She let out a long wheezing gasp. “H... h... how?”

“He was doing what he loved. He was on a mission to a remote planet known as Uralaschi.”

“But he was just an exobiologist!” Theresa’s mother cried. “How? How?”

Theresa put her arms around her mother and held her tight, then sobbed.

“The planet was attacked from high orbit by the Plarestans. They’re a fierce reptilian race with an expanding empire-- a very rapidly expanding empire. Greg was there to help. And he did. When the Plarestans attacked he was one of many victims were were killed in the assault.”

She nodded, then wiped the tears from her cheeks.

“Thank you,” she said in a whisper. “Thank you for taking the time to tell me in person.”

Captain Olson smiled. “It was the least I could do. And if there is anything else I can do for you...”

Her mother shook her head. “No,” she croaked.

After the Captain left Theresa retreated to her room. When the door closed she fell onto her bed and shuddered uncontrollably.

The mission log was released several months later and she studied every word. Her father had elected to stay on the planet with the Uralaschi. When the Plarestans began to bombard the planet’s cities, they ignited a tremendous firestorm that burned most every standing structure in the city in which her father was staying. Her father had rushed into a building to help a stranded Uralaschi child. The building collapsed, and both he and the child were crushed.

Often when she was alone-- even many years later-- her thoughts would flood with memories of her father. She reviewed the entire defense of the Uralaschi. What if he hadn’t stayed on the planet? What if three Plarestan ships hadn’t raised it’s shields? What if... It was useless, she knew. There was nothing her father would have done differently-- nothing she would have had him do differently. He did what was noble and right. But still she wondered and too often she cried.

Chapter 4: The Probe

"You must be nuts!" squeaked Harding. "I'm not sending a probe down through thousands of kilometers of high velocity gas! There's nothing down there, Mathers— you're imagining things!"

"Sir," Mathers replied, "the planet could have a form of life that has never been seen before! This could be one of the greatest scientific discoveries of recent times!"

"I can't risk the possibility of losing a probe in the hurricanes of that planet's frigid atmosphere!" Harding shouted. "This theory of yours about life forms down there-- it's ridiculous! Can you imagine what Admiral Bramahk would say if he finds out that I've been losing probes by chasing after ghosts?"

"Then why don't *you* explain these scans!" Mathers shot back. She pointed to a vidscreen that showed the readings she had taken of the planet's ocean. "*No way* are these inorganic, lifeless, natural phenomena! Even with all the garbage we're getting from the planet's magnetosphere, these signals are far too organized for anything other than a life form to have generated them! And look at *this*!" She directed his attention to the monitor and showed him where several ghostly images seemed to be swimming, or perhaps drifting in unison with the ocean's currents— and then a number of them turned and swam in the opposite direction! "There is no natural phenomenon that can do *that*, Captain! That *has* to be a biological entity we're looking at. But we're not going to find out *what* it is from up here. The planet's magnetosphere is too strong for a clear signal to come through. We *have* to send a probe if we're going to find out anything more!"

"You want an explanation? Fine. *Here's* one. Now listen very carefully. It's just signal noise. That's all. Those signals you've got are so fuzzy that you can't even be sure if they're real. Now why don't you forget that you ever saw any of this and let the rest of us get on with this study!"

Harding turned his back on Theresa and headed for the door.

"Captain!" she belted. He stopped with one foot still in midair and wheeled 'round on his other heel and gave her a stare that said "Just open your mouth and utter one single word and I'll have you cleaning up dingo dung on the most remote desert planet in the least traveled fringe of the galaxy!"

"Captain, Sir," she said in a softer tone, but with assurance. "Do you want to drag all of these signals back to Alliance Planetary Research only to have some first year Academy graduate student discover these images and show them to Admiral Bramahk, who will most certainly then ask why *you* didn't order a probe?"

There was an inordinately long pause as Harding stared at those strange slithery shapes. Mathers could almost hear the whirring of the little mechanical wheels in Harding's bureaucratic brain as he weighed the possible damage a major screw-up might do to his career.

"Alright," Harding relented. "But only one probe. Down there and straight back." And he turned around and zipped out the door so fast that her "Thank

you" was still forming on her lips as the door snapped closed behind him.

Mathers set to work programming the probe with a snide conviction. Harding had asked her for scans and she gave him scans. Now she comes up with something that could be one of the truly great discovery in the annals of exobiology and Harding does everything he can to shoot it down!

"He must have written his final report days ago" Theresa muttered to herself. "And now my new findings are threatening to force him to scrap the whole thing and start over. No wonder he's putting up such a fight!"

#

At last she finished the work on the probe. She reviewed her work to make sure she hadn't forgotten something, then contacted Harding.

"Ready to go, Sir."

"I don't want that probe gone any more than four hours, Engineer," Harding grunted.

"Four hours!! But Sir,.."

"But me no buts, Mathers. Now get that thing going."

But Mathers knew that four hours would be long enough. The signal should be very clear by the time the probe was within 5 kilometers of the strange shapes she wanted to study. With any luck she would gather enough data on the life forms of this planet to keep the scholars of Planetary Sciences busy for years.

She released the probe and it plunged down into the planet's frigid atmosphere. She monitored the probe's sensors as it descended. The temperatures were only a few degrees above absolute zero within the first several hundred kilometers. At 700 kilometers winds of several hundreds of kilometers per hour whipped thin wispy clouds of pink, blue, and gold. At first the probe found nothing but hydrogen and helium; but as the probe reached a depth of about 1,000 km, snows of methane and water appeared. At about 9,000 km, the temperature had risen to a bit below zero degrees Centigrade. Just a few kilometers below the probe sensed liquid. Mathers brought the probe in slowly, then descended into a boundless ocean of water that spun in tremendous currents of more than 100 kilometers per hour. She accelerated the probe to match speed and dove into the current. The probe continued to descend into the black abyss for another 800 kilometers. As it neared the beings' realm, Mathers saw their familiar low-frequency signals clear and strong. She slowed the probe's descent when it was just a few thousand meters above the signals, then monitored for life-signs. Finally they appeared and Mathers stopped the probe's descent completely. She processed the probe's infrared telemetry with false-color imaging and displayed it on her vidscreen. What she saw was a vast, temperate ocean rendered in testy pink and bristling with tiny points of electric blue cool.

"Fish!" she exclaimed. "Vast schools of them! Or perhaps these are something more like diatoms... Wait!! What is *that!*"

An enormously long *something* wriggled past the probe, some 100 meters below. It measured more than a kilometer long! There were others of the long

wiggly things up ahead. And more behind as well. *Many* more. Mathers looked at the probe's isolation camera and confirmed that these were the beings that had been identified by the *Rim Quest*'s instruments.

Were they feeding on the tiny electric blue dots? A moment fooling with the probe's azimuthal resolution... Yes, it would seem that the long slithery things -- *Seaworms* she would call them-- were consuming the little dots-- *Seastars*. But there was something else... Clusters of signals along the radio band. She looked at the timeline of one of the signals on her monitor and gasped. "It's... it's *music*!"

Chapter 5: Impossible!

Prof. Therenin Ochohanno, head of Starfleet Scientific Research, hated these perfunctory early morning summons more than almost anything else about Starfleet. No please, no thank you-- just "Get your butt over to the Admiral's Conference Room pronto!" It wasn't so much the summons as the *hour*. For reasons known only to the very highest echelons of Starfleet Command, any impromptu briefing or staff meeting absolutely *had* to take place at O-FIVE HUNDRED HOURS SHARP. And even more annoying was the fact that although the Admiralty has the most technologically advanced software systems in Starfleet at its disposal, its replicators absolutely could not produce a decent coffee. Oh well, no use complaining about it, Therenin thought. Just get on over there and try to appear interested. He probably just wants another routine project status report.

"Therenin!" Admiral Mirov Yergevneyov greeted him at the door with that impossible-looking grin of his that seemed as though it must have been clipped from a cartoon. "How are you this fine morning?!"

"I might feel fine if it were actually morning, Sir. But since it is still the middle of the night I'm afraid I would much prefer to be home abed."

"Ooooooh, Therenin," cooed Mirov, wagging his finger and turning up one mischievous corner of his mouth. "If you weren't the very finest administrator Scientific Research has ever had I'm afraid that remark would cost you your job!" Mirov laughed, and Therenin managed a low chuckle that may even have been convincing. Then Therenin stumbled his way over to the replicator and ordered a carafe of wretched coffee and a muffin and thereupon collapsed into his seat at the end of the conference table.

Therenin gazed idly at the overbright ceiling as the Admiral enumerated staff promotions and replacements. Brostonnik to the Advanced Graviton Research Station on Mortinol IV. Irisineal to head the Beta Quadrant Botanical Inventory team. And so forth for almost half an hour. Then the Admiral launched into a long panegyric on the importance of the various science research departments to Starfleet. Therenin thought idly about The Rim, where one could still have adventures. No telling what might turn up out there. New planets to explore! New civilizations to contact! That's what had first stimulated his interest in research-- the adventure of new discoveries! To set out across the uncharted sectors of the galaxy in a research vessel little larger than a shuttle, crammed with every sensor the technicians could conceive; to rove from star system to star system, measuring, charting, observing... When he was young and full of boyish enthusiasm he had captained just such a vessel-- the aptly named *Aspire*-- ten years he spent exploring the outer reaches of Federation space, nearly at the edge of the galaxy. Of course that was long before anyone knew about the Rim.

Federation Space comprised a roughly cylindrical volume about 10,000 light years in diameter and 1,000 light years in height-- almost four *billion* sectors-- most of which were unexplored and, in fact, uncharted. To cross 10,000 light years would require more than 100 years at warp 8. Even a normal

subspace transmission takes about 4 years. Subspace relay station boosting can reduce this time to 6 months-- but the Federation Subspace Relay Station Network really only serves less than 1 percent of the total volume of Federation space.

Some 125 years after the Dominion War, one of the more remote Federation star bases received a very weak subspace message from one Irial Lyne, obviously of human physiognomy, who claimed to be the President of something he called The Alliance. She gave her location as more than 12,000 light years from Earth! She explained that a great many refugees of that terrible conflict-- humans, Klingons, Cardassians, some Ferengi, and even a few Vulcans-- had migrated toward the center of the galaxy and had settled a number of uninhabited Class M planets.

Old rivalries endured. The Klingons and Cardassians quickly withdrew to separate domains. The Ferengi bartered throughout the region but refused the appeals of the humans to work cooperatively as allies. Nonetheless on the 10th anniversary of their arrival Lyne inaugurated the founding of The Alliance, consisting of several million humans and about one million Vulcans. They had a makeshift Fleet consisting mostly of refurbished transport vessels, a research institute, and an officers' training school that they called the Alliance Academy. "After a decade of organization and training," Lyne urged, "we now seek formal admission to the Federation, and formal accreditation for our Academy."

"Accommodation," as Lyne's petition came to be known, was bitterly opposed by the Federation Officers' Union, among many other groups, which adamantly refused to consider that any organization, however well accredited, could ever live up to the standards of Starfleet Academy. In the Senate, Morian Birgenbaugh was the most outspoken opponent of accommodation.

"This Irial Lyne," he bellowed on the floor of the Federation Senate, "is nothing more than a charlatan and a pretender! And her deluded Rimmers are cowards and deserters who abandoned the Federation to the depredations of the Dominion and their Cardassian lackeys in its hour of greatest need! We must cease all communications with these Rimmers. We must disavow their appeals for citizenship. We must never allow the motion to accommodate these traitors and miscreants to reach a vote! And I will fight it with every fiber of my being!"

And true to his word he kept it tied up in committee for the last five years.

Still, Therenin thought the Rim the most exciting thing to happen to Scientific Research in years. His colleague in the Federation Diplomatic Institute, Prof. Nirian Urtala, provided him with semiannual briefings on Rim discoveries, which of course were received about four years after they were sent. These he shared with Admiral Yergevneyov, but with no one else.

If he could, Therenin would transfer to the Rim in a heartbeat. Now he did little more than send younger men on the adventures in which he could no longer participate. How he missed it. How he wished he could go... Jaredeza, his wife, would never have approved, of course. But that's probably the only advantage of losing her-- he was free to imagine what life might have been like if...

"Professor!" the Admiral exclaimed. "Can you stop daydreaming about

voluptuous young research cadets or whatever it is that a solitary centenarian fantasizes about and kindly give us your report!"

"Yes Sir! Yes indeed, Sir. Indeed I can." Therenin scanned the faces that had all turned his direction and took a long, slow swig of his lousy coffee. He stood, shuffled some papers before him and then solemnly announced "There is nothing new to report, Sir!" Then he sat down.

For a moment Admiral Yergevneyov was too stunned to say anything. He looked around the room and tried to move his lips but could make no sound. Finally he rested his eyes on Therenin. "What??!" he blustered. "What do you mean 'There is nothing to report'??" Clearly the Admiral had ceased to be amused. "You may think that age has its privilege, Professor Ochohanno, but here we are all equals. Now let's have your report!"

Therenin again struggled to his feet. "Very well then, Sir. DS 53 is still undergoing repairs after the recent assault by the Borg and all research projects there are on hold until the computer system can be fully restored. Otherwise all Research staff here on Earth and throughout the galaxy continue to work on schedule and within budget-- no significant problems or advancements to report." And with that he sat down once again.

The Admiral appeared rather dazed when Ochohanno completed his report. As Therenin reached for his carafe, the Admiral said almost genially "Thank you, Professor, for giving us the privilege of listening to your *full* report. Now let's turn our attention..."

The Admiral droned on for barely endurable minutes more, and Therenin thought about the stifling bureaucracy of his life. Then his vidscreen flashed-- video message from Prof. Mair. The subject of the message consisted of a single word: Arial.

Therenin rose from his chair; the Admiral stopped in mid-sentence and glared at him.

"Urgent message from Professor Mair," he said; and the Admiral nodded as Therenin headed for the door. Others around the table watched with puzzled expressions as he slipped out quietly and left them to endure the monotony of the Admiral's droning.

When Therenin reached his office, he opened the message. The image of Professor Mair appeared.

"This morning," Mair's image said, "when I was scanning a recent supernova on the Rim I found that it wasn't emitting any neutrinos!"

"What?" Therenin said out loud in disbelief. "But the proof of Colgate and White..." More than two centuries earlier Colgate and White had proved that neutrinos carry away the vast majority of every supernova's energy-- and they had even derived a formula for the total energy that should be released as neutrinos. In fact almost 99% of the star's energy was known to be released in the form of neutrinos.

"No doubt you're thinking of the proof of Colgate and White," Prof. Mair continued. "That was my first thought too. So I consulted the records of Star Base 1036, which is nearest to the star. And to my amazement I found that the

star stopped emitting neutrinos about 3 weeks ago-- 20 days before the star collapsed!"

Therenin gasped. The generation of neutrinos is a basic property of the nuclear furnace that powers every star. "That... that can't happen!"

"As you are well aware, the laws of stellar evolution say that can't happen," Mair's image continued. "But that's not the most disturbing observation. When I consulted earlier records I found that the star that went nova was actually a relatively young and otherwise perfectly normal yellow star!"

"Impossible!" Therenin exclaimed, rising abruptly from his seat.

"That's impossible-- according to everything we know about the natural process of stellar evolution," Mair continued. "So there is only one logical explanation."

Therenin's jaw dropped at the obvious conclusion.

"It must be an *artificial* nova, Therenin," Mair said with cold certainty. "It *must* be."

Chapter 6: Arial

150 years earlier, before the Dominion War, a brilliant but unstable 17 year old mathematician by the name of Arial Sirchian received a transmission from Starfleet Spacetime Research. It was a response to his proposal for a research project that Arial had submitted some six months previous. Gerald Morbrich, then the best known authority on spacetime physics, was asked to review the dense mathematics that accompanied Sirchian's proposal. "Too often I am asked to review incoherent scribbles of this sort," he sniffed. "Please don't trouble me with doggerel of this sort again." The proposal was summarily rejected.

Arial went out late that night to a park by the San Francisco harbor on his native Earth and wrote ten pages of dense mathematics. He transmitted the pages to Prof. Gerald Morbrich, then took off his coat and dove into the harbor. The police found his coat neatly folded by the water, but his body was never found.

When Prof. Morbrich saw Sirchian's transmission, he shunted it to one of his graduate students, a young woman named Gabrielle Mirvial. "Here," he grouched, "see if you can make any sense of this. But don't spend too much time on it-- it's probably just a waste of time."

Mirvial was puzzled by the transmission. At first reading it seemed to her to be about number theory-- decidedly not her forte. She was preparing for her exams and really didn't have time to delve into something that was so alien to her expertise. She filed it with a collection of miscellaneous documents and returned to more urgent studies.

More than six months later, Gabrielle accepted a post at a distant star base. As she was cleaning her room in preparation for her trip, she came across the Sirchian transmission and decided to read it in transit. She struggled with it for almost three weeks while aboard the transport vessel, seldom leaving her room, working at it for almost 20 hours a day, picking tenaciously at each equation. When she was just two days away from the star base, she composed a message for Prof. Morbrich.

"I've been studying the transmission you asked me to look at last year-- the one by Arial Sirchian," she wrote. "I think I've figured out the first seven pages. Professor, I don't think I am overstating the case to say that it is absolutely the most original piece of mathematics in the last century. I think I understand enough of it to say that it is utterly revolutionary. You absolutely *must* look at it."

The professor was stunned. Mirvial had been his finest student in the last two decades. It was difficult for him to believe that Sirchian could have produced anything worth reading; but Mirvial had a profound understanding of mathematics. Perhaps there was something worthwhile in the transmission after all.

He arranged to have Mirvial return to Starfleet Academy to review the Sirchian transmission with a select group of mathematicians. He chose the

android Data, the blind but deeply profound human Arvela Pandrolla, and the Vulcan Virian who had three times been awarded the Fields Medal for originality in Mathematics. The five of them were sequestered in a special wing of Starfleet Headquarters. For three months they struggled to comprehend the ten pages that Sirchian had dashed out on the last day of his life. When at last they announced that they had reached consensus, Morbrich asked Admiral Portinal, then director of Scientific Research, to audit the group's final assessment of their studies.

"Admiral," Morbrich said in a muted mumble, "if what we have understood here is correct, we have before us nothing less than the foundations of subspace tunneling mechanics."

The Admiral gasped. Never before in the long history of subspace science had such a thing been imagined. A wormhole is a tunnel through subspace. Every natural wormhole known other than the one at Deep Space 9 was unstable, and despite several generations of intensive research, no theoretical framework for creating a wormhole artificially had ever been conceived. To somehow be able connect one region of space to another that may be tens or hundreds of thousands of light years distant-- well it was just one of those deep mysteries that no amount of philosophizing could ever compass. Until then.

The Admiral rubbed his temple. "Do you... do you think that it is... that this is something we can use?"

"Use?" Data asked. "How do you mean, sir?"

"I mean in the making of new tools, devices..." The Admiral waved his hands emptily.

"And weapons," Pandrolla added with a wince.

The room was silent for a long moment.

"Well, yes," Morbrich offered. "New sensors that can actually look at subspace structures from a great distance."

"Or a subspace tunneling communications device that would enable instantaneous communications over galactic distances," offered Pandrolla.

"Or a subspace transporter," Mirvial offered with a bright smile.

The Admiral stared blankly at Mirvial, evidently oblivious to the significance of the idea.

"For interplanetary transport," Mirvial said with a shrug.

The Admiral's eyes went wide. "You can't be serious!" he gaped. He looked at each of them, searching for signs of uncertainty or dissent. The others nodded their heads.

The Admiral fell back in his chair. "This is far more than I ever imagined. From this point forward this entire subject-- Sirchian, subspace tunneling mechanics, interplanetary transport-- all of it-- it's all top secret! No one outside this room is to hear of it unless I specifically approve! I want you to design a research project to develop the technologies we've just discussed. Whatever you need-- I will get it for you! I will get funds for this. I can do it discreetly. Just

tell me what you need.” He tapped the tabletop. “We’ll need a code word for this project.”

“Arial,” Mirvial said; and the others nodded in agreement.

“Perfect,” the Admiral agreed. He looked intently at each of them, then scowled. “Well, what are you waiting for? Get going!”

#

Data was permitted to return to his post at Cambridge University; but the others were sent to a star system some 800 light years distant from sector 001. A new research facility was built on the delta planet, a cold Class K dubbed X97VS with a very thin atmosphere. The Federation built a small city deep underground, cloaked it thoroughly, and populated it with nearly 100,000 people, all of them sworn to live in isolation, sequestered from the galaxy outside. The facility was so secret that its annual reports were encrypted with a code known only to the Federation President.

Within 10 years the team had developed a theoretical model of a remote sensing technology based on the new subspace mechanics. The design called for a station to be built in orbit around a neutron star that would draw its power directly from the star’s electromagnetic field. With more power than a million planets at its disposal, the observatory would be able to probe the interior of a star more than 100,000 light years distant. It would offer unprecedented resolution, but at the cost of an extremely narrow field of view of only one cubic meter.

With most of the theoretical issues settled, it soon became apparent that the greatest technical challenge would be the station’s shielding. The energy released by even a small starquake would be enough to destroy even the best defended star base in the Federation. The station’s shields would have to be extremely resilient while still permitting it to draw power from the star itself. Eventually they came up with a shield topology that resembled an enormous sphere intercepted by two funnels joined at their small ends. The funnels channeled the star’s energy directly into the core of the power generator. The shields had to permit the power of the pulsar’s enormous magnetic field to pass through unimpeded while remaining impervious to anything that might cause damage to the base. This problem alone required more than 80 years of concentrated effort to solve.

While work on the shielding continued, the theoretical team began studying the problem of a transport mechanism. An ancient transport system conceived and apparently implemented by the semi-legendary Iconians was capable of transporting people across vast distances from a *single terminus*. The Federation team had initially considered such a design, but they were unable to come up with any theoretical model of how such a device might be built. No, theirs was a two terminus system-- one that would require the same equipment at each end. That meant that the two devices had to be kept in absolute synchronization-- and that could only be achieved by employing the subspace communications technology they had developed to keep the two terminals in sync. Despite this advantage, the technical requirements of the transport

mechanism itself were highly complex. More than 50 years of research and computer modeling went into the design and simulation of the transporter. Even so, the transporter team was ready with a final design about a decade before the shielding problems were fully worked out. With a few modifications, the design was updated to support the transport technology as well. The completed station architecture consisted of a power station capable of harnessing more than one million times the energy of any known planetary defense system, a remote sensing device that could scan the interior of a star on the opposite side of the galaxy, a communications system that could contact a remote station with an effective transmission speed of warp 10, and a transport mechanism that could send a person or an object across the entire span of the Federation in an instant.

The residents of X97VS developed a plan to circumscribe Federation space with stations, each with a communications array and a transporter capable of accommodating an entire starship. They identified 10,000 strategically positioned pulsars that were likely candidates for the requisite power source. And in 2645 they presented the President with a 250 year plan to survey each pulsar, to select 4,000 best locations from the 10,000, and to construct a station at each. The plan was known in the highest circles of Starfleet as the Watchtower plan.

Federation President Virilia Bantrall, a Vulcan, considered it but would only authorize construction of two test facilities. "Show me that the technology works and then we can consider something more grandiose," she said.

When the Federation received Lyne's message requesting admission into the Federation, intelligence units urged that The Alliance be given the design for the Subspace Tunneling technology. That would provide the Federation with a form of access to the Rim that no other group in the Alpha Quadrant would have.

"Madam President," Therenin had argued, "this is a singular opportunity. We have the chance to learn about a region of the galaxy that is unknown to us! Already we have heard of ancient and powerful empires. This is a chance we cannot afford to pass up."

President Brachtal spent the next two days reviewing the options, then finally called Therenin into her office.

"I'm approving the plan," she said. "What I'm doing is illegal. If the Senate were to find out I would probably be impeached. I was hoping to work with Senator Birgenbaugh to come up with a satisfactory compromise. But it soon became clear that the Senator had no interest in compromise. I do not make this move lightly. The Senator is right-- we don't know much about these Rimmers. We don't know if we can trust them. This project will help us learn who to trust. But more than that, it could open the door to a vast new region of the galaxy. That's why I have decided to risk my political career to advance this cause. And you, Therenin-- you will be the director of this project. Whatever you need you will have. But you must promise me that you will maintain absolute secrecy."

"Yes, Madam President, you can count on me."

Therenin first sent a set of Starfleet regulations to Lyne.

"We would like to engage with you in the development of a new

technology,” Therenin said. “The project will be a test. If you complete the project successfully we will consider your application for formal admission to the Federation. But before we can begin you must demonstrate to us that the Alliance has adopted policies to ensure that the technologies critical to this project will remain secret.”

Eight years later Therenin received Lyne’s response.

Dear Professor,

I have attached the minutes of the Alliance Congress in which it voted unanimously to adopt the Alliance Secrets Act. As you will see the vote was taken more than two years ago. The Act provides for harsh punishment of the release any classified information, whether through incompetence or deliberate intent. I have also attached the entire body of the Act.

The minutes also show that the same Congress formally adopted all Federation policies, including the Prime Directive. We are now fully in compliance with all requirements for admission into the Federation and I truly believe that our participation in this project will prove the degree of our commitment. We will accept your decision as to whether you think this a sufficient guarantee of our trustworthiness.

Sincerely,

Irial Lyne

President, Alliance of Planets

Once President Bantrall had reviewed Lyne’s letter, she approved the plan. That was 10 years-- and two presidential successions-- earlier.

The first station, known as the Federation Arial, was built about 100 light years from Earth, with Prof. Haywood Mair in command. The second, called the Alliance Arial, was built deep inside Alliance controlled space.

Just months earlier Prof. Mair and his team had demonstrated the technology’s usefulness by producing the very first scans of the interior of a star. The Subspace Tunneling Observatory (STO) was directed at the core of the neutron star about which it orbited and provided the first direct confirmation of the theory of neutron star composition.

But work on the transporter ran into difficulties concerning the gravimetric stabilizers. The Admiralty ordered all work on the transporter stopped until the problem was solved.

Any starship must have stabilizers if it is to maintain orbit. The Arial’s transporter had to have stabilizers designed to compensate for variations in the gravitational field of immensely greater power than a starship would ever experience when orbiting a planet. Most importantly, the two transporters at each terminus had to be synchronized. If either transportation platform were even slightly out of alignment, the result would be a misalignment of the

rematerialized object. Very bad, especially for a biological entity.

In the original design, the stabilizers alone were to draw more power than a thousand planetary defense systems. But it was found that an unforeseen effect concerning stellar precession would cause the stabilizers to oscillate, even if only infinitesimally. A pulsar has a tremendous current running around its girth, and it spins on its axis at a fantastic rate. These two facts cause the star to be oblate at its equator. As the axes of most stars have a precession-- that is, a wobble-- any orbiting object is subjected to a constantly changing gravitational field. The design teams were aware of this problem, but they had not fully accounted for it in their models. They considered half a dozen refinements, but after months of computations and simulations they rendered the opinion that the stabilizer design as originally envisioned would not support the transport of anything larger than 1 cubic meter. It was a severe disappointment, but a full redesign would take several more years-- perhaps decades. So the transporter was redesigned for smaller dimensions. And it was decided that it should never be used to transport living organisms until the problem of the wobble could be solved.

The communications system was given the code name "Hermes" after the Greek messenger of the gods. One Hermes system was built at each facility. And now after 150 years of research and planning they were finally nearing the time of the very first test of the Hermes. Within a few days they would know if it were truly possible to communicate in real time across the span of the galaxy.

Chapter 7: Speech

Mathers had spent most of an hour studying the Seaworms and their communal singing. It was a very complex polyphonic song that was shared by all of the Seaworms she could observe. And there were many more signals than could be matched with observable Seaworms. She felt certain that *all* of the Seaworms swimming in the planet's immense sea were singing a part in this... symphony? Opera? She even had the computer transcribe the radio signal to audio and play it in her lab. A very hypnotic, ethereal sort of music, but with a dark romanticism about it. She found it easy to work to, and she kept it on throughout the morning as she monitored the various sensory readings. Then, about one hour into the probe's mission, just as she was studying the probe's gravimetric readings, she heard an echoing crescendo of rising tones. She put everything down and listened hard as their voices rose toward a thunderous conclusion.

"Stunning!" she said softly when they had finished. "I've got goosebumps! What beautiful music!"

Then there followed several moments of silence during which Mathers could do nothing. She stared blankly at her monitor and breathed a soft serenity. And then... And then there was another type of sound entirely. Something very different. But she knew just what type of sound that was, knew with the certainty that comes with more than a year of training just for this type of event.

"Speech!!"

Mathers scrambled for the console controls. She quickly routed the radio signals through the language translator, figuring that it should have enough time before Harding pulled the plug to compose a full grammar. Now those courses she had taken five years earlier at the academy were about to pay off: Psycholinguistics from crotchety old Prof. Tarirrianaa. All her friends had chided her for studying something so foreign to the day-to-day business of an Alliance engineer. But she was now about to prove them wrong. Dear old Tarirrianaa, with his Marvesian waxy complexion and mannerisms, and his dear high-pitched Marvesian voice and his four Varnhoff Medals on the wall of that cramped little office that was literally stuffed from floor to ceiling with piles of academic research papers. She met with him in that tiny office every Friday of her Senior year while he supervised her baccalaureate thesis on Proto-Vulcan ideographs. He had taught her very well. And one thing she had learned from him was precisely how to identify the elements of language. The signals she was getting now were *definitely* some form of speech, and not just noise from some electronic transmitter.

She finally got the translator operating. Yes... She monitored the translator's status screen and could see that it was finding the general outlines of the vocabulary. "Won't be long now" she said aloud. She leaned back and thought about the significance of discovering a life form that lives in the ocean of a frozen gas giant. That these beings sing a choral piece as if they were all part of one vast choir. And that they have a language! The exobiologists will be

stunned by this one! But... A warning light in the status window.

"What now?" she asked aloud of no one in particular. She studied the status lines that were displayed at the bottom of the window. "Damn! It's thrashing!"

The translator had come up against something that it couldn't parse. Something intrinsic to the language that made it very different from any other language known. What could it be? How could she figure out what it was? The translator was the result of almost four million man-years of work and experience! There just wasn't enough time for her to debug the ten billion lines of program source code that went into the translator's logic systems. And that miserable Harding was certain to march by her post in another few minutes to tell her to pull the plug on the probe. She would have recordings of the raw speech data, she would have the music. But if the translator were able to complete its job, she might be able to convince him to leave the probe down permanently. If not, he would probably look at her long, slithery shapes and the little blue dots and laugh.

She worked feverishly to figure out where the program was trapped. Down to her last five minutes. Mathers scanned the translator's process log for the thousandth time. She hoped to find the idiosyncrasy about the aliens' language that had thrown the grammar constructor into a loop. Harding was certain to call. She scanned the thousands of lines of code that flew past her on the screen-- the same lines she had stared at for the last hour. She had identified the main outlines of the loop but had made almost no progress in understanding its actual causes. It was a problem that seemed somehow to be related to nouns and proper names. There-- at the top of the loop-- the constructor had identified a noun. Most nouns of the language are very long, some having as many as 100 syllables. Further down the program falls into a referential descent that it can't resolve, like a hall of mirrors all reflecting the image of something else. It's as if... Wait! She compared two of the very long words that she assumed were proper names and noticed that their first 83 syllables matched-- but that the final 25 did not. Perhaps the problem is that the nouns and proper names are really only a very small part of a much larger picture. Maybe the program can't resolve them because their names are all interwoven into a vast interrelated tapestry of the aliens' history and culture. And perhaps the proper names themselves change to reflect the evolution of their history! Yes-- that would explain it! The nouns and proper names would actually be like fragments of their history, each one telling a portion of the story of their race. A language with words that change with each use-- it's something she knew the Translator was never designed to handle. No matter. She would worry about the tapestry later. For now-- how to get the translator out of its loop?

She pounded her forehead. "Come on, Theresa-- think! What can you do? We can't just ignore all the proper names; they're almost always a subject! What we need is just the part of the name that identifies it, but without the tapestry. How do I do that? Wait... What if I tell the program to render each noun or proper name in only a few pronounceable syllables and shunt the resolution problem off to a background task? If it works it would at least produce

intelligible speech!"

"Mathers... Are you there, Mathers?" That despicable Harding was nothing if not prompt. "Time to pack up and go! Let's get the show on the road!"

"One moment, Sir" Mathers said as she recompiled the translator's constructor.

"We don't have any more time, Mathers..."

"...beyond the Witherstream. There is someone... or something... out there observing us."

"Who's that you're talking to, Mathers?" Harding asked with his annoying high-pitched whine.

"Thula, Thula-- do you think we are in any danger?"

Chapter 8: Ripples

Therenin collapsed into the chair behind his desk.

"Computer," he croaked. "I want to compose a message for Professor Haywood Mair."

"Ready," the computer hummed.

Therenin stared blankly at the only piece of personal memorabilia in the room-- the Presidential Citation that was mounted on the wall by the door. Just a small plaque "for outstanding contributions to the science of quark stars." That little plaque represented ten years of concentrated scholastics-- and the bitterness of his loss.

"THIS is what I'm talking about!" Jaredeza had screeched on that day twenty three years earlier. She grabbed the plaque and threw it directly at him. "You've made a greater contribution to your damned quark stars than you ever made to our marriage!"

He stared weakly at the plaque and relived for a moment the stabs of anxiety he felt then as he watched her walk out through the door for the last time.

"Hello, Professor," Therenin croaked, "I'm composing this message about two hours before my usual waking hour. But I didn't get up two hours early. I've been up all night. The Admiral has been running me and my entire research staff ragged trying to find some explanation-- ANY explanation-- for the nova.

"We've thought of subspace interphasing and a hundred other possibilities." Therenin stopped for a moment as if to catch his breath, then shook his head solemnly. "It has all come to nothing, though. The stubborn fact is that someone or something has tampered with a star. For what purpose? To what end? Is it a preparation to invasion? Is it a prelude to extermination? How many other stars could be attacked like this? Our people can't think of any natural phenomenon that could cause a young, normal main sequence star to collapse as if it were an old, burned out red giant. We are grasping at straws, Haywood. Anything, however preposterous, must be considered.

"I know you have already supplied us with every last bit of data that you have obtained. And I know you can't record anything further from an event that took place more than two weeks ago," Therenin continued with a dismissive wave of his hand. "But the Admiral could care less about such inconveniences as the Laws of Nature. He wants an answer-- now! And my best theoreticians have advised me that terson displacements, if they are real, are the only known or imagined physical phenomena that have even the slightest chance of explaining this nova.

Therenin clenched his fists. "And so it is my duty to inform you that as of this moment your station is on full alert, that you and your staff are to scan every last cubic centimeter of space in the region of the nova and to provide Starfleet Research with every scrap of data you obtain.

"I'm quite serious, Haywood. This is a Priority One matter. This is *not* a request, Haywood." Therenin sighed and sent the document.

Then he contacted Corial Perthama, the alluring Director of Starfleet biological sciences. When her serene visage appeared on the vidscreen he mustered the best facsimile of a smile his weariness would permit and asked "What have you learned?" with a voice that sounded far less grandfatherly than he had hoped.

"Sir, we have worked non-stop for the last 18 hours. We considered microbes, the Borg, beings of other dimensions-- anything, everything..." She waved her hands awkwardly. "We can't think of any biological beings that could be responsible for these novae. We just don't have enough information."

"Very well," Therenin said with a voice that he hoped sounded appreciative. "Thank you. I knew I was sending you on a fool's errand, but I really had no choice. The Admiral commands and I must obey. You may tell your people to get some rest."

He signed off and called three more department heads, who gave him three similarly dismal reports. He took another swig of lukewarm coffee and hauled himself up from his chair, then stumbled numbly down the hall toward Admiral Yergevneyov's office.

He could hear Jaredeza's condemnations echoing like footfalls in an empty hall. He missed her. Too often in the last few days he felt hollow, indifferent to reality, mechanical. Twenty three years; but he could still hear her words and see the glint of distaste in her eyes with such clarity that it might have been yesterday.

He buzzed at the Admiral's door and it swished open.

"Good morning, Sir," he said with a bow.

"Well," the Admiral growled, "what have you got for me?"

Therenin winced. "Not much, Admiral. We think that tERNON displacements might be involved somehow, but since we really don't have a sound theoretical foundation..."

"That's not acceptable!" the Admiral stormed as he jumped up and planted two fists on the desktop. "In case you haven't noticed, Professor, we have a galactic crisis on our hands here! The Admiralty is convinced that this is either a prelude to invasion, or it is the first shot fired in an all out war on the Federation! We've got to have answers!"

Therenin nodded. "I understand that, Sir, but we just don't have enough information. My people have been working without rest for the past 24 hours. We have considered this problem from every aspect and we just don't understand anything about it. Our theoreticians are the very best in the Federation, and they simply don't have any conceptual framework with which to..."

But Therenin stopped in mid-sentence. He held out his hand and looked at it with a puzzled look of disbelief. The Admiral too gaped and gazed in bewilderment about the room.

"My hand... the room... everything... it's..." Therenin stuttered.

"It's rippled!" the Admiral exclaimed.

Chapter 9: Calibration

Professor Mair called an emergency staff meeting in the conference room. Verliac, the profound, complex Vulcan theoretician, came in looking groggy; Mair had to wake him from a sleep cycle that had begun only two hours earlier. Bralton, an athletic Klingon astrophysicist who twice won the Klingon Tralbek Medal for Jurdash, the Klingon version of Karate, and an astrophysicist of wide renown, was doing his Gar Haljir exercises when Mair rang him. He entered the conference room looking fierce, fresh and alert. And Sara Thoms, as usual, was reading when Mair called. Did she ever sleep at all, he wondered? She was one of the finest mathematicians he had ever met, and a marvelous pianist, too. But very private. Very mysterious. Very sexy.

"I have just received a message from Prof. Ochohanno of Starfleet," Haywood began. "We have been charged with the task of researching the cause of the nova. We are to devote all available energies to the problem. What I want is to develop a schedule that will permit us to exhaustively search the region of the nova with the STO while also continuing the calibration of the communications array. I want the array ready for its first test in 72 hours as originally scheduled." He looked around the room and saw expressions of uncertainty. "What can we do?"

There was silence for several moments.

"We can program the STO to automatically search the region of the nova," Verliac said, "and to report any anomalies found."

"Yes," Mair acknowledged, "that would free us from having to monitor the observatory. I would like you to oversee the monitoring of the observatory, Verliac. I want to be notified the moment it identifies the cause."

Verliac shook his head. "I'm afraid that wouldn't be possible, Sir. The computer will only be able to recognize anomalies, not causes. We will then have to sift through the results it finds to determine a cause."

"Very well then," Mair said with a nod. "Make sure that it notifies me immediately when it finds anything out of the ordinary." Verliac nodded his assent. "What else can we do?"

"We can run the validation of the communication software in parallel with the sensor calibration," Sara offered with her soft sultry voice.

"Good," said Mair. "That will reduce calibration time for the communications array."

"We can power up the primary systems before we test out the backups," said Bralton.

"You can't be serious!" Thoms exclaimed. "That is contrary to every Federation principle of Starbase operations!"

"If we were desperate," Bralton retorted, "it would be necessary."

"We're not *that* desperate," Mair said sharply with a glare at Bralton. "Not yet, anyway. But if we were," he continued after a pause, "I assure you we would consider every option."

"We could postpone the power distribution verification until after the sensors are online," Verliac said.

"Excellent!" Mair said. "Bralton, I would like you to work on getting the backup power systems running. Verliac, can you supervise the software validation?"

Verliac gave another assenting nod.

"Good. And Sara," Mair continued, "I would like you to look into the possibility of running all of our calibrations in parallel."

Sara Thoms stared up at the ceiling with a look of absorbed uncertainty, her coffee cup pressed close to her breast. "Yes. Yes, I think that just may be possible."

"If you need more resources, let me know," Mair said. "If you can think of any reason that we might have to delay the time of our first communications test, let me know. Any questions?"

No one spoke. Verliac shook his head.

"Fine. Then let's get to work. We don't have a moment to lose!"

Chapter 10: Escape

Argov Firin grew up on a planet far from the bustling core of The Alliance. His parents had planned to start a new life on an unfettered world. His father ran a business supplying shield technology-- but someone in his company sold the design for a new device to an acquisitive Ferengi. Alliance Command investigated his father and everyone in his company for high treason. His father was never charged, but the scandal ruined his company and made it impossible for him to work in a similar capacity again.

So he bought a number of grape vines and booked flight on the Trieste, a cargo ship that was to deliver medical supplies to a remote Alliance research station in the Vorlassian sector. There was a small human colony on one of the nearby M class planets. He'd start a winery and perhaps, after twenty years of quietude, when Alliance Command had forgotten his name, he would be able to return to the hub of civilization once again.

But as they approached the colony a heavily armed ship of unknown configuration decloaked off the starboard bow. The ship ignored all hails and powered up weapons.

"Helm-- bring the ship to a halt!" the Captain said. "And shut down the engines! If they see we're no threat, maybe they'll let us go."

But the other vessel fired three shots that destroyed the Trieste's engines, then fired once more to blast a hole in the cargo bay. It pulled alongside and a boarding party of heavily armed humanoids stormed the ship. The Trieste was pillaged and they slaughtered all of the adults. Argov saw his own parents killed before his eyes. He was only seven.

There were three children on board-- Argov and two girls. Melissa was eight, very average. But Dorain even then at 10 was clearly an exceptional beauty. They were taken aboard the alien vessel, then herded into a holding cell by a brutish thug with a massive chest. He pushed them inside and slammed the door shut.

Melissa stood haplessly in the center of the room with her arms hanging limply at her side and shuddered with tears. In the melée of their capture she had soiled herself, and the smell was embarrassing to her. Argov sat numbly on the floor and gaped at the door. Dorain surveyed the room, saw that there was no possible means of escape, and scowled at the door with her arms folded across her chest.

After what seemed like hours they heard footsteps outside and then the door was thrown open. A swarthy man stepped inside and gazed intently at each of them. Then he stepped closer to Dorain, grabbed her chin in one muscular paw and stared eagerly into her eyes.

"The Emir will be most pleased with this delicious present," he gloated. Dorain tried to wrest herself free but his grip was too strong. She flailed her arms at him. "And feisty too! That's just what the Emir likes! Pity I don't dare sample the goods before we arrive..."

Argov leaped to his feet and kicked the man's leg. The man wheeled

'round and smacked Argov with the back of his hand-- so hard that Argov stumbled backwards and cracked his head against the wall. Blood was streaming from his nose, the room whirled, everything was a blurry confusion.

"You will soon learn respect," the man growled. "You-- all of you-- you're subjects of the Qualandrian Empire now. You, boy, will serve the Emir's third wife-- unless you are disobedient. One misstep and you will be sent to the mines." He stepped toward Melissa and took her brusquely by the forearm. "You're very lucky-- you are to be assigned to the palace kitchens." Melissa wrinkled her nose and scowled sullenly at the floor. "We'll be arriving in 10 parvats, so you'll need to get cleaned up." He gestured to the guard at the door and a thin hawk-nosed man crept in. "This is Steward Varn. He'll see that you are given proper clothes and training in palace protocols. But I warn you. Any failure to cooperate will be reported. Just one word of disrespect and you'll be sent to the mines." He snapped his fingers and Varn led them down a long hall to a room with one narrow bed, a chair, a table, and an open shower and toilet in the corner.

"This will be where the three of you will live for the next 10 parvats," he said in his oily voice. He pointed to the ceiling where they saw a camera directed at them. "Know that you will be watched at all times." Then he told them to disrobe and get cleaned up. And all the while his snake-like eyes devoured every movement of Dorain's svelte and nubile frame. "I will teach you the proper etiquette for slaves of the Qualandrian Empire. You will learn to obey every command you are given. You are never to question anything you are asked to do. You are never to speak to any Qualandrian unless you are asked to do so. And if any of you resists or disobeys any command you will all be sent to the mines. Know this and understand: The three of you have been chosen for privileged positions because you are young and we can shape you into good Qualandrian citizens. Do not for one bhurgat imagine that the privileges we have granted you cannot be taken away!"

Melissa was given a gray and black smock with a white kerchief for her hair. Argov was dressed in a shirt of blue and gold brocade and short blue pants. Dorain was given a gorgeous pink and yellow gown with lovely slippers.

After a time of fitful sleep Varn entered their room and led them to a hall where they were each served a bowl of wormy gruel.

"This is wroalameg," Varn explained. "It is the food of slaves. Do not imagine that you will ever be served anything else."

The girls looked at their gruel with disgust. Argov sampled it and grimaced. "It's OK," he lied. "Look, you'd better eat it. You heard what Varn said-- we're not going to get anything else. So unless you want to starve, you'd better eat."

A parvat, they soon learned, was much longer than a standard Earth day; almost twice as long.

"If you fall asleep when you are supposed to be on duty, you will be punished," Varn warned. "Not only must you speak and act like a Qualandrian, but you must live like one too."

For every one of the next ten parvats Varn gave them lengthy lessons in Qualandrian slave etiquette, the Qualandrian language, and Qualandrian values and mores. "You must never look your masters in the eye," Varn declared. "You must always bow before your masters when you greet them and ask 'How may I be of service Master?' And when you are dismissed you must bow again and say 'Thank you Master for granting me your leave.'"

When at last they arrived at the Third Wife's estate they were put on board a shuttle and taken down to the planet. Argov watched in silent despair as Melissa and Dorain were escorted to the Third Wife's palace. Would he ever see them again? Would he ever learn of their fortunes?

He was taken under guard to a building at the outer fringe of the Third Wife's compound. Once inside he was strapped to a table. What now, he wondered? He wanted to ask what they were going to do, but he knew his place. He was a mere slave, and he dared not ask any Qualandrian a question. He wanted to cry out, to scream, to wrestle free of the armbands that tied him to the table. But he could do nothing. Something was injected into his neck and within moments he was unconscious.

He awoke in another room, still strapped to the table. What had happened to him? A Qualandrian female entered the room and released him to the custody of a guard.

"You will come with me," the guard grunted, and he escorted Argov back to the Third Wife's palace. He was given a bunk in the slave quarters three levels below ground. Later when the anaesthetic wore off he felt an aching in his groin; and only then did he realize that they had made him a eunuch.

The next parvat a guard escorted him to a room in the second sub-basement and pushed him inside.

"Ah, the human. I am Gorvac, Overseer of Slaves. You are to serve at Her Ladyship's personal quarters. I cannot stress enough the honor and importance of this position. You will report to Madam Mrtov. She is the mistress of the Ladies in Waiting. You are to do whatever she bids of you. You must carry out her orders with the utmost delicacy. And know this: If Madam Mrtov is displeased in the least with your handling of any of her demands she has absolute discretion to treat you as she sees fit. The last boy who was given this honor failed in his duties. Madam Mrtov had him flogged and sent to the mines."

"Yes, Master," Argov said with a deep bow. "It is my pleasure to serve."

Madam Mrtov's residence occupied an entire floor of the East Wing. He was taken to her foyer and told to wait. After what must have been hours he was shown into her sitting room.

She was dressed in a red robe that glittered with silver and gold. Her hair was black, her eyes were green, her face beautiful but with wrinkles around the eyes. He bowed to one knee. "How may I be of service, Master?"

"Madam! You will call me Madam!"

"Yes, Madam. I am sorry that I have disappointed you."

"That Gorvac-- he just doesn't know how to train slaves. Be careful, slave, or your fate will be that of your predecessor. You will be here first thing every

parvat. You will take off your shoes on entering my foyer. And you will remove those ridiculous clothes that Gorvac gave you and wear these.” She handed him a purple robe with a gold belt. “Oh, and you will bathe before you arrive. I can smell your stink from here.”

Every parvat he arrived early, dressed in his purple robe. The color, he soon learned, was that of a eunuch. It meant that he was permitted to enter the Madam’s quarters. For the most part his duties involved serving as a courier for the Ladies In Waiting. The Ladies lived in a wing of the palace where no men, other than eunuchs, were allowed. But each of the Ladies had romantic interests, and his responsibility was to convey secret communications to their lovers outside the palace walls. Any failure to faithfully convey a message was punishable by death. And should he divulge any of the secrets to which he was privy his tongue would be cut out and he would be sent to the mines.

In time he was allowed to live in an apartment adjacent to Madam’s. He had plenty to eat, his duties were not taxing, and in truth his life was rather comfortable, especially as compared to the hard lives of the many slaves who worked in the Royal laundries and kitchens.

They gave him the best of educations. He was trained in mathematics, physics, chemistry, astronomy, and of course the Qualandrian language and customs. He was also given extensive lectures on the history of the Qualandrian empire which, he assumed, were chiefly lies. Of course they purposefully kept him from any form of military training-- weapons, hand-to-hand combat, tactics, aviation-- anything that might prepare him for escape. But his teachers recognized in him a spark of intelligence and a gift for mathematics. So great was his admiration that Torlag, his physics instructor, befriended him and treated him like a son.

But all the while his heart burned with rage. These Qualandrians, these *barbarians* had killed his parents and had destroyed the research outpost and colony. They had made him a eunuch and a slave. He loathed them with every fiber of his being and he vowed one day to escape.

How to manage it? The Qualandrians had built a small empire of a few dozen planetary systems on terror and brutality. They were fierce and strong, perhaps strong enough to one day threaten The Alliance. He knew he would have to wait for his moment and seize it when it came. And to do that he would have to appear pliant, genial, even content. His masters must never suspect that he despised them and yearned to be free. Any mistake would likely mean banishment to the mines and therefore certain death under the crushing burden of hard labor.

He worked tirelessly on his lessons. Each bit of knowledge he acquired he thought of as a precious key that might one day prove indispensable to his escape. He studied every spare moment of every day. He asked his teachers for additional lessons. He studied every map and star chart he was permitted to see. And he read every book on technology and science to which he had access.

Every night when he was at last allowed to creep off to his apartment for a

few fitful hours of sleep he spent the first 30 minutes or so meditating and attempting to purge his thoughts of the hate that he felt for his masters. He had to prevent his emotions from clouding his mind.

And every parvat he thought about Melissa and Dorain. He could never inquire about them-- if Madam Mrtov were to find out she would send him straight to the mines. He could only wonder. He wondered how they had been treated. He wondered if he would ever see either of them again. Had they been sent to the mines? Would either of them ever find love or happiness?

He felt so guilty. He wouldn't be able to speak to anyone about his plans. He wouldn't be able to save either Melissa or Dorain. He wouldn't even be able to inquire of their fates. He would have to conduct all of his planning, all of his betrayal and deceit, in absolute solitude and silence.

Gradually he was entrusted with greater responsibility. No male other than the Emir himself-- not even a eunuch-- was permitted within the Third Wife's inner chambers. But when he was 16 he was entrusted with preparing the Third Wife's vehicles for transportation, and he was even given the keys to the Royal garage, though of course as a slave he could never receive pilot training.

But Argov had in fact learned how to pilot a ship by patiently watching every time he traveled in the staff shuttle on an errand of the estate. He knew how to power up the engines, how to free the docking clamps, how to engage the shields, how to steer the craft-- everything, in fact, that he would need to know to effect an escape except how to use the weapons and cloaking device. He knew that access to the weapons systems on a Qualandrian vessel was secured with password and biometric controls. So he would have to develop a plan that didn't require the use of either the weapons systems or a cloak.

For a year he plotted and planned. He wanted revenge-- oh, how he wanted revenge. But he knew it was impossible. At least as slaves the girls would still be alive. Perhaps after his return to Alliance space he would be able to help negotiate their release. No, he would have to forgo revenge. The best he could hope to do would be to slip out silently, unnoticed, so that no one would know he was gone until it was too late.

Once every 400 parvats-- a little less than 2 standard years-- the Emir's five wives joined in a processional down the main avenue of Qualandria to the palace. Each of the wives rode in a special carriage with a transparent blast-proof canopy that afforded a clear view of the royal personage. The palace itself would be surrounded by perhaps 3 million Qualandrians, all clamoring for a glimpse of each of the five wives.

All he needed was a 10 minute diversion. That would give him enough time to slip away unobserved. An easy way to acquire that 10 minutes would be to hide an explosive inside the Third Wife's carriage and time it to go off just as her carriage reached the palace gates. The palace and the compound would be thrown into turmoil and he would then have just enough time to slip into the garage with a pack of supplies, jump into the Third Wife's speeder, and head off toward the far side of the planet's first moon. From there he would jump to warp 8 on a course for Valenaria, the Alliance base nearest to the sector. In a week

he'd be sleeping in a bed in Alliance space for the first time in more than 10 years.

The only problem with the plan was that as a slave he would never be able to obtain the necessary explosives. Besides, the Third Wife's carriage had sensors that detect explosives. And before the Third Wife would be permitted to board the carriage it would be searched first by the palace eunuchs, then by two security officers who worked under the watchful eye of a security drone. No explosive device, however small and unobtrusive, could evade such a thorough search.

But perhaps he could accomplish the same effect with nothing more than a bit of software. The driver of the Third Wife's carriage would program the navigation software sometime the week before the procession. This time the route was scheduled to take them thrice around the palace before entering the main gate. Although the carriages were capable of flight, the processionalists always took a surface route, and the carriages floated majestically just a few meters above the ground. Argov knew that any variation in a carriage's routing would result in a security alert that would bring everything to a halt. In that realization he at last saw his chance for escape.

Only a Pilot of the Royal Guard was allowed to program the navigational software of a Royal Wife's carriage. Access would of course be password protected. Argov knew how to program it-- in fact he had programmed the staff shuttle's software many times for the Ladies In Waiting. The software for the carriage had many protections to prevent hazard to the Third Wife. It would be impossible to program the carriage to crash into the palace or to plunge into the crowd. But perhaps it would be possible to make enough of a change to force the entire processional to stop.

Argov concealed a small recorder in the cabin of the Third Wife's carriage. Two parvats before the processional the Pilot went to the garage to enter the route. Late the evening before the processional, before returning to his apartment, Argov went into the garage and retrieved the recorder, then replayed it to obtain the pilot's password. He then opened the navigation manager and added a few embellishments to the processional route. Then he programmed the staff shuttle for a special mission, and hid some supplies behind the fuel pumps.

On the day of the processional, the five carriages converged on the palace from the estates of the five wives of the Emir. There was a record turnout-- almost 4 million Qualandrians surrounded the palace. The sound of their cheering was deafening. The carriages circled the palace once; and they circled it a second time.

Argov was watching the broadcast of the processional with some of the staff and slaves in a small lunchroom. He slipped out quietly and ambled softly toward the garage. Once inside, he started up the staff shuttle and sent it on its programmed errand.

The route took the carriages along the banks of Dream Lake, the huge artificial lake built by the Emir for the purpose of hosting his nautical feasts. The

banks of the lake were lined with people, many of them out for a picnic on a day that was warm and bright as much as for the thrill of seeing the Five Wives. Just as the Third Wife's carriage approached the lake for the third time, it veered off from the processional route toward the middle of the lake and there it stopped.

Pandemonium! Alarms and alerts went off all throughout the palace. A dozen or more police speeders rushed out to the Third Wife's carriage and surrounded it. A moment later the transparent blast-proof canopy of the Third Wife's carriage opened; then the carriage slowly, gracefully, gently rolled over until it was upside down. The surrounding contingent of police watched in horror as the Third Wife and her entire retinue were dumped into the very middle of Dream Lake.

Argov got into the Third Wife's speeder with his pack of supplies and powered up the engine. He slid it quietly out of its dock. At that very moment the staff shuttle accelerated downward in a death dive straight for the Third Wife's compound where it crashed with a thunderous explosion. A siren sounded throughout the compound and the fire doors were locked down. Argov directed the speeder on a casual ascent toward the planet's first moon. Within a few minutes he was at the far side of the moon where he punched the throttle to warp 8. And from there he had a most boring and uneventful cruise to Valenaria.

Chapter 11: Ripples on the Rim

The education Argov Firin received from the Qualandrians served him well. In the year of his return to the Alliance he applied to the Alliance Academy and was accepted immediately. He graduated first in his class, demonstrating a talent for physics. In fact, he published an article on temporal mechanics as an undergraduate that caught the attention of Prof. Baralaxian, the Academy's resident expert on the subject. In his final year, three of his professors solicited him to return for graduate study.

"You have great abilities, Argov," said Professor Targort, his physics instructor. "You owe it to yourself to continue to develop your skills."

Argov shook his head. "I cannot sequester myself in the halls of learning," he confided. "I want to serve as Ambassador to Qualandria. Who would know better than me how to deal with them? One day, I hope-- one day I want to be the one to negotiate for the release of Melissa and Dorain. One day I want to be the one to liberate them."

Once President Lyne received the plans for the Ariel station from Starfleet the Alliance set to work on it with all deliberate speed.

"We must not fail to meet the very aggressive schedule that Starfleet has set for the completion of the Ariel," she said. "Everything depends on it. The trust that Starfleet has in the Alliance depends on it. Our admission into the Federation depends on it. Our connection to our past in Federation space depends on it. Many citizens of the Federation think of us as traitors and deserters. If we ever wish to rehabilitate our image, this is our one opportunity to do that. We must not fail."

As the base neared completion President Lyne appointed Admiral Norianna Triminol project manager for the Alliance Ariel, designated as Alliance Base AB493S. And she picked Argov as her base commander over 43 other applicants.

And now Admiral Triminol was waiting for Argov's next report. She would want to see an update to the same project plans that Argov had spent two hours reporting about yesterday. The power system had been completed almost two years ahead of schedule, and it had been running without so much as a quiver for more than a year. His team was now in the final countdown to the first communications test which was scheduled to take place in just 72 hours. Today the plan called for them to run a stress test on the power circuitry. Some two million kilometers away, the pulsar that provided the station's power whirled on its axis almost 3000 times per second. Before they could channel the vast power of the pulsar's intense magnetic field into the communications system they had to be sure that it would accommodate the stress.

Argov sat in his self-adjusting chair, which sensed his unease and made itself a bit more cushy than usual. He checked his readouts again. He checked the personnel roster again. He checked once again that the summary report he had prepared for Norianna had the power utilization curve, the personnel assignments, the updated project plan, the computer simulations-- anything that

she might conceivably ask to see. He was determined to impress the Admiral with his thoroughness. He was determined to make Admiral before he was 40-- and this was just the assignment that would get him there. Now at last he was just 72 hours from proving to the entire Admiralty that he had what it takes to get the job done.

He could think of nothing further to check; everything was in perfect running order. The only thing left to do was to wait, and waiting was decidedly not something he did well. He reloaded a simulation he had been working on to evaluate the effect of a cometary collision with the pulsar that powered the station. He felt certain that even a very large body wouldn't disable the station, but he wanted definitive proof. He focused his attention on the vidscreen, asked the computer to run the simulation, and watched intently as the digital asteroid approached the pulsar.

But suddenly the image seemed blurry. He blinked, rubbed his eyes, looked again-- but the image seemed terrible. Then he looked up. Everything in his office-- the vidscreen, the walls, the desk, his own hand-- EVERYTHING was rippled! There were ripples-- very much like ripples on the surface of a lake-- roughly 1 centimeter wide moving upward through the visual field in widening circles. Argov was bewildered. He touched the surface of his desk and it *felt* rippled. He clutched his head and moaned, then looked around the room for anything that was unaffected by the ripples and could find nothing.

And then it was over, as abruptly as it had begun.

"Engineer Thompson!" he barked at the computer. There was an inordinately long silence. "Engineer Thompson" he hissed with tense concern. Lieutenant Myron Thompson was his chief engineer-- a large man, very intense, and eminently capable.

"Yes Sir!" Thompson replied. "Sorry Sir, we've had... distractions."

"Did you experience anything weird? Like the whole room was uh... rippled?"

"Yes, Sir, we did. Everyone here experienced it."

"WHAT WAS IT?"

"We don't know, Sir, but I'm fairly sure it wasn't us."

"So... it was the pulsar that caused those... ripples?"

"I'm not sure, Sir. What's that? Oh. Uh... wait... Sir, we're getting some reports in now. Just a minute, Sir..."

Argov waited, drumming his fingertips on the desk. "Sir," Thompson finally continued. "It wasn't us, and it wasn't the pulsar."

"How do you know that, Thompson?"

"Because we just got a message from the Iriscene Outpost Base. They just experienced the same phenomenon-- and at the very same moment at which we experienced it."

Argov sat stunned and rubbed his forehead with a clenched fist. What could it be? Perhaps it was a feature of this part of the galaxy. But then it didn't seem to be natural. Perhaps it was a mode of communication. Perhaps it was

some new weapon.

“Very well, Thompson,” he continued. “I want the Subspace Communications array fully operational in 30 minutes, and I want all senior officers to meet with me in my office in 5 minutes.”

“Yes Sir!” Thompson replied.

Chapter 12: Evil On The Whitherstream

"Thula!" Hillawarial tunneled to Thula. "What is this... this new evil?" Her voice was tinged with hysteria.

Thula too had sensed the strange object drifting high above them, following them on the Whitherstream. It was unlike anything he had ever known before. It had a strange shimmering glow, and beneath that a hard surface, something cold and menacing. Was it observing the Valencriara? Was it preparing an attack? Certainly this was a thing that the Histories had never mentioned. Perhaps it is some terrible new evil, he thought.

"I do not know what this... this strange object might be," Thula replied. "Is it a prelude to the Final Days, as told in the Valenrallis? Does it forebode some terrible vengeance? I cannot say. It may even be a harbinger of glad tidings. We do not yet know enough to call it evil, my love."

Thula tunneled to the other Archons.

"What does this new intruder seek?" the Archon Alirian asked Thula. "There is nothing in the Histories like this! What will we do?"

"I don't know what it is any more than you do," Thula said. "But we have no reason to believe that the Valencriara are in any danger just yet. We must be watchful, but unafraid. Do not call it evil until we know that it is. The Valencriara are sometimes like children. You must be their strength in this time of uncertainty. We will start by determining the source of this new object. Is it a natural phenomenon? Is it real? Comes it from within the Whitherstream, or from outside?"

"Outside the Whitherstream!" exclaimed Shoreen. "It is far too hostile outside the Whitherstream for anything to survive! Only a madman would believe otherwise! You know what our explorers have reported to us! Terrible heat below the Swelterdepths and intense cold above the Winterheights. If you must dwell on fantasies at a time of crisis such as this, Thula, perhaps you are unfit to be our Connair!"

"I only ask you to leave open the *possibility* that this object may have originated from outside. We must be strong at this time. And we must keep our minds open. Gather all accounts of the object, taking care to ask each of the Valencriara to try to describe what they know, not what they fear. Perhaps some elementary mathematics based on their reports will provide us with a point of origin for this object."

The Archons muttered their assent and disbursed. For his part, Thula felt a need for solitude-- a chance to reflect on the meaning of this intruder. He swam with the Whitherstream and felt its softness enfolding him. Then he dove to the Swelterdepths and drank in its wonderfully pure methane and drifted through its torpid heat for a long while-- very much longer than usual-- then returned, languidly. He turned his kilometer-long torso against the Whitherstream and swam into it briefly and remembered what it was like when he was younger-- how he and the other brash young Kirrens would swim against the Whitherstream until one collapsed from exhaustion. Very foolish they were then.

Very foolish indeed.

A group of excitable Kirrens had started a rumor that the object was in fact one of the Travenallwraaks, the terrible beasts of the Final Days that would descend into the Whitherstream and destroy the Valencriara. And Yoralenna, one of the more pliant Archons, had immediately concurred.

"My people!" Yoralenna screeched, "we now know the terrible purpose of this new Evil, this object that drifts with us on the Whitherstream. It is strange, it appears unlike anything we have ever experienced. It seems not to be living, but it drifts with us, watching us, waiting."

Thula listened as Yoralenna continued his harangue. Yes, yes, Thula thought to himself. That is all very evident. It appears to be something very foreign. It may in fact be something from Outside. It may even be spying on us. But we do not yet know enough to call it Evil.

"...and I tell you all now," Yoralenna shouted, "this Evil will devour us all! It is the first of the Travenallwraaks! It will descend upon us and it will consume us with who knows what manner of horrors! The Final Days are upon us! We must destroy it now, while we still can! We must fight against it now, before it attacks us!"

The humming of assent echoed through the entire length of the Homering. The Valencriara were listening to him. More than listening, they were following.

"My people!" Thula sang deeply, sonorously. "You have heard our brother Yoralenna tell us that a terrible Evil is preparing to descend upon us. You have heard him claim that the object swimming above us is a Travenallwraak. And you have heard him say that we must attack it now, or it will attack us first!" Thula paused and listened to the song of the Homering and waited until it became very quiet. "But we do not yet know if this object, whose songs we cannot hear and whose strange glow is so foreign, is indeed an Evil. We only know that it drifts with us on the Whitherstream.

"This is an historic moment, my people," Thula continued. "We have found final proof of the ancient assertions of the Oteronermae. For more than 10,000 cycles they have taught that the Whitherstream is but a small part of a vastly larger Universe. They have taught that there are other worlds, and perhaps other beings, beyond our own Whitherstream. They have taught that our world revolves about another, much larger, and very distant world. And while we don't know what these other worlds are like, or what songs their people may sing, we do know the location of at least one of these worlds. It is the source of this strange object. Because this object cannot be from our world. It is not Valencriara, it is not Trallimianalla. Indeed, it does not seem to be living. It must be from Beyond!"

The hummsong crescendoed to a confirmatory swell. Thula waited several moments while the Valencriara sang their growing understanding of the ancient truths.

"We are visited now by an object, something very foreign to the Whitherstream," Thula continued. "Something unlike anything we have ever known. It is hard. It has no song. It is also very cold. It certainly seems

threatening, and perhaps evil, too." Thula waited while the hummsong swelled slightly and then subsided. "But it has given us no indication at all..." Suddenly Thula stopped short. "What... What is happening? The Whitherstream-- it's... it's *rippled!*"

Chapter 13: Ripples on the *Rim Quest*

Mathers had been monitoring the conversations of the Valencriara. She wanted to tell them that the Alliance was not evil. She wanted to tell them that they could trust the Alliance to do whatever was best for them. But that would have been a violation of the Prime Directive, which now the Alliance followed every bit as strictly as the Federation. And much as she wanted to in this case, she could never bring herself to violate Starfleet's most sacred code. But after listening to their conversations for the last several hours, she had come to think of the Valencriara as her friends. She felt that she knew them. And she wanted very much to help them in whatever way she could.

Mathers had to admit that Harding had been very understanding once he heard the Valencriara talk. He had agreed to allow the probe to continue its mission. He had even gone so far as to suggest that the probe's mission should be continued, perhaps indefinitely. It was much more than she ever would have expected.

"Thank you, sir," she had said, sincerely. "Thank you very much."

So much they had learned about these strange beings, the Valencriara -- "Valiant Ones", in the last six hours of monitoring. They are able to communicate with one another by broadcasting in the radio frequency band; they call this "tunneling". They sing a communal song that they call the "Joy Sing." They appear to have had a very long history; Thula spoke of the "22,000 cycles" of their history. But cycles of what, exactly? Surely an ocean 10,000 kilometers from the surface can't be seasonal!

And then she noticed a population of asteroids with highly eccentric orbits in the system. After some quick calculations, she realized that the Zeta planet would, on average, collide with 10,000 asteroids large enough to reach the planet's ocean once each revolution of the planet around its star. That would mean that every year there would appear to be a season of meteorite rainfall, even at the fantastic depth that was home to the Valencriara. Perhaps that's what Thula was talking about. If so, the Valencriara's 22,000 cycles would correspond to more than 250,000 Federation Standard years! Can their culture really be that ancient?

But then Mathers stopped and pressed both palms to her head.

"Oooh, what is this?" she said, thinking that she might get ill if it didn't stop soon. "What... What is going on??" She staggered across the lab, reached for the countertop, missed, and collapsed in a heap.

Mathers closed her eyes and listened as the Valencriara talked feverishly about the ripples. At first there was general panic in the Whitherstream, a confused tangle of exclamations, shouts, bewildered cries, much like the shrieks and groans heard on board the *Rim Quest*.

"What is this, Mathers?" Harding asked as he entered her lab. "Are these... these ripples... Are they caused by those Seaworms?"

Mathers struggled to her feet. "I don't see how they could be, Sir. The Valencriara don't have a technology. Besides, they're as alarmed by it as are

we. Wait... Listen-- the Valencriara are analyzing the effect!"

Theresa opened her eyes long enough to adjust the filters of the probe's sensors and select a single conversation. She scanned several conversations before focusing on an exchange between the Archon Uriallannu and Nortolinnta.

"...there. There-- do you sense it, Archon?" Nortolinnta asked. "A cyclic recurrence of the hyperharmonic streamwaves..."

"Yes... I see what you mean," Uriallannu agreed. "What do you make of it, Nortolinnta?"

"I believe that it's part of some type of embedded messaging," Nortolinnta replied.

"Then you think that it is an alien effect?" Uriallannu asked.

"The effect is being observed throughout the Whitherstream. The Valencriara do not have the capacity to produce any such effect, and certainly not of this magnitude, even if large numbers were operating in concert."

"So should it be possible for us to reconstruct the message?"

Nortolinnta paused for a long moment, during which time the many other conversations of the Valencriara could be heard over the probe's transmissions as a thin whisper. "Yes, Archon Uriallannu," he replied at last. "There is enough information present in the ripples themselves that the images can be recovered in full."

"Images?" Uriallannu asked.

"Yes, Archon, an image. The message consists of 1437 separate images, projections, of... of structures and alien beings. The images are accompanied by other signals as well, but I cannot interpret them."

"Then we are being invaded," Uriallannu said with finality.

Nortolinnta said nothing in reply. And as Mathers listened the whispers of the other Valencriara grew still. Perhaps the others had reached much the same conclusion. But *images*! In this tangled mess of illusion? Just then the ripples stopped and Mathers breathed a deep, soft sigh of relief. She heard a moan from the floor. She looked down and saw Harding doubled over on the floor. And then a very foul smell.

"Oh, Captain!" Mathers exclaimed. Harding was obviously quite ill. "Are you alright?" Harding nodded weakly, both hands on his stomach, then hauled himself back to his feet and stumbled back toward the bridge. Or the head. A moment later she was busy at the controls of the ship's sensors. She had to find those images!

"Computer!" she directed. "Access the ship's sensors and analyze all sensory input data over the last five minutes. Can you identify images embedded within the ripple effect?"

"Accessing..." said the computer's feminine voice. "Please define 'ripple effect.'"

"Uhhh," Mathers stammered. "I mean a distortion in the... the... visual perception of space that is like narrow bands of... of... well, *distortion*! Like ripples on a pond, in expanding circles, moving along diagonals from... from my

upper left to lower right."

"Working..." the computer promised.

"My people!" Thula's voice broke in with his characteristic strength and reassurance. Mathers listened to him speak as she continued to work with the sensors. "We have all analyzed the 'ripple' effect. We have all viewed the terrible images of the alien beings whose songs we cannot understand and whose shapes are so very abhorrent. We do not know whether the messages of these images were intended for us, but this would seem unlikely since we do not have any means of interpreting their songs, speech, or thoughts. And so, my valiant people, we must have courage! We must not fear! We still know far too little to say whether this latest intrusion on the simplicity and order of the Whitherstream bodes us well or ill. We only know that these events-- the watchful visitor who swims above us, and now these terrifying images brought to us embedded in rippled torsions of space itself-- have different sources. At present we have no reason to believe that they are in any way related. We must be brave, my people, and must not give in to the tremors of uncertainty..."

"Analysis complete," the computer announced in its digital voice. "No image found embedded in the sensor data."

"No?!" Mathers exclaimed. How could the Seaworms find images embedded in the ripples if the shipboard computer couldn't? "Computer. Listen, I am not a cryptographer, so I don't know how to phrase this correctly. But I *know* that there are images embedded in those ripples somewhere. Did you look for any kind of encoding, any special image compression method, *anything* that might have made it possible to store an image in the ripples?"

"All known data, image, and signal encryption methods were applied in analyzing the data contained in the ripple effect," the computer reported.

"Well, what about *unknown* methods of encryption?" Mathers exclaimed.

"Please identify the encryption method you wish to use," the computer demanded.

"Oh you're useless!" Mathers rested her chin on one palm and pounded her brow with the other. "Wait. Wait just a minute. Computer, play back the conversation between Nortolinnta and the Archon he was talking with, what's his name-- Uriallannu!"

"...there. There-- do you sense it, Archon? A cyclic recurrence of the hyperharmonic streamwaves..."

"Yes! Whoa! Stop-- that's it! Now computer, can you identify the 'hyperharmonic streamwaves' that Nortolinnta mentioned in the ripples?"

"Please define 'hyperharmonic streamwaves'."

"Ohhh you *stupid* machine!" Mathers wailed. "I was hoping *you* could tell me what they are!"

"Mathers!" Harding screeched into his com. "Update!"

"Yes, Sir. We were monitoring the Valenciara..."

"Yes, I remember."

"And when the ripples hit we listened in on two of them-- the Archon

Uriallannu and Nortolinnta..."

"Oh, really?"

"Yes Sir. I'm sure you remember Nortolinnta. He seemed to be a very astute observer. I think he might be a very capable mathematician."

"Ohhh," Harding moaned.

"Yes, well, anyway Nortolinnta mentioned something about 'hyperharmonic streamwaves,' whatever they may be, and then said that there are *images* embedded in the ripples."

"There are what? Say again?"

"*Images*," Mathers repeated. "Embedded in the ripples. So naturally I asked the Computer to look for the images in the ripples."

"Yes, very good, Mathers. What'd you find out?"

"Nothing, Sir. The computer couldn't find any images at all."

"What? Are you sure?"

"Absolutely. I asked the computer if it had tried all known encryption methods."

"And???"

"And it said that it had tried every known method for encryption and compression and Sir, I have just finished asking the computer every way I can think of to try to find the images and the fact is I'm completely stumped. Nothing I have tried has worked! I just don't know where to go from here, Sir!" Mathers paused a moment and listened for Harding on the com. "Sir?"

"Ohhh." Mathers could hear just enough unsteadiness in Harding's voice to tell her that he was still struggling with nausea. "Yes, I'm listening Mathers. Continue."

"Sir, I really think that we should consider making a breach of the Prime Directive. The Seaworms are able to find images of whoever sent the message in the ripples, and our computer wasn't able to. So I was thinking that we should talk to the Seaworms directly and get them to tell us how to find the images. Do you agree, Sir?" Another lengthy pause. "Sir?"

"Ohhhh. OK. If Vena concurs." Harding's voice was quavering. Mathers could just hear as he rushed from the bridge to the head.

"Vena!" Mathers barked into her com.

"Yes, Theresa?"

"Can you meet with me in my lab?"

"I'm working on those..."

"NOW Vena. This is urgent!"

"Very well," Vena huffed. She swept in through the door a couple of minutes later. Mathers played back Nortolinnta's discussion about the 'hyperharmonic streamwaves' and Vena looked over the inquiry log from Mathers' search for the images with evident fascination.

"And there is really nothing else that we can try..." she mused.

"But the Seaworms said that they were able to find the images! How can

they find it if the Alliance's finest computer software can't?"

"There must be something that the computer has missed, something we have missed. Something about the ripples that we haven't understood."

"Yes yes yes," Mathers growled. "That's perfectly evident, Vena, but WHAT is it that we've missed? The embedded message could be very important. It could explain the source of the ripples. It may even be some sort of warning. We have to..."

"Whoa, slow down Theresa! We don't know what purposes the images are intended to serve-- or even if there *are* any! Let's not jump to conclusions just yet!"

"OK, OK." Mathers breathed a long sigh and called up a recording of the ripple effect. "Where do we start? I've been over it and over it. The Seaworms know something about this that we don't, and I can't help thinking that we should do whatever is necessary to learn whatever it is that they know."

There was a long silence while Vena stared at the screen. Despite her earlier dislike, Mathers felt that Vena had been very accommodating. Perhaps she had been to harsh earlier. Perhaps it was just jealousy.

Vena shrugged. "Alright. Let's talk to them and learn whatever we can. It seems to be the only way we're going to know for sure."

It took an hour to program the probe to broadcast voice translation as converted by the Universal Translator in a frequency range that the Seaworms would recognize. In that time Harding regained his composure. He joined them in Engineering when they were finally ready.

"We've routed the probe's broadcast transmitters through the Universal Translator and tied the voice recognition processors directly to Engineering," Theresa explained. "Once we begin, the probe will act like a relay station between us and the Seaworms."

"Thank you, Mathers," Harding sneered, "but I *do* understand the concept. Now let's get some answers!"

At least he's back to his normal insensitive, insufferable self, Mathers thought.

Mathers activated the com link. "Thula. Thula, may I speak with you!"

They waited a while-- a very long while. Nothing.

"Thula!" she said again, stronger this time. "Thula, I need your help!"

"Speak, stranger!" Thula's voice boomed. "Speak, and tell me who you are!"

"Thula," Mathers continued with too much excitement in her voice, "My name is Theresa. I am speaking to you through an intermediary. It's a device that we made for observing the Valencriara."

"Then why do you not show yourself and speak with me directly, Theresa?" Thula's voice was firm and commanding.

"Because I can't, Thula," Mathers replied. "We-- my people-- are not able to survive in the Whitherstream."

"That is absurd, Theresa!" Thula challenged. "*All that lives is blessed by*

the Whitherstream. All the world is embraced by the Whitherstream. So have our poets taught us, and so do the Valenciara believe."

"And we have the utmost respect for that view, Thula," Mathers said, trying to sound reassuring. "But we come from outside the Whitherstream. We are not adapted to it. We can't even visit you there without being destroyed."

There was a long moment of silence as Thula absorbed the full import of her reply.

"And what do you want from me?" Thula asked at last.

"We have listened to the Valenciara talk about..."

"Why do you listen in on our conversations without greeting us directly first?" Thula interrupted. "The Valenciara are valiant. They do not hide behind intermediaries! They do not make devices to listen to the conversations of others without their knowledge!"

Mathers said nothing for a long time. Thula was right to think that he was under surveillance. He was right to feel violated. It was a reaction common to most species at first contact. How to reassure him that their intentions were good when Thula had every right to feel threatened?

"Thula," Mathers pleaded, "we think you can help us solve a problem that is common to both of us. We, too, experienced the strange ripple effect that disrupted the Whitherstream just a while ago. We had hoped that you might be able to help us understand it. But perhaps it would be better if we were to give you a look at us and at our world first."

"But if you are from outside the Whitherstream as you claim," Thula replied, "I would have to leave the Whitherstream altogether, would I not?"

"No, you wouldn't. If you will give me time to adjust our intermediary, I can provide you with full access to our ship's computer..."

Harding hit the com disconnect icon. "You CANNOT be serious!" he blurted. "You can't just give them access to the computer system! That is a flagrant violation of the Prime Directive! Do you know what it may do to these people if we give them access to our technology? Do you realize what you're saying?!"

"What I had intended to give them, Sir, is read-only access. Can you think of a better way for us to gain their trust? They would be able to see what we look like, they could read our poetry and our histories, they could learn all about us. And I can't imagine how they could possibly benefit from gaining access to our technological data. The Valenciara don't have a technology! They haven't developed one in over 250,000 years! They certainly aren't going to develop one now-- they have no reason to! They're better protected by the Zeta planet's 'Whitherstream' than is the Alliance home base by its planetary defense grid! Besides, I don't see that we have a choice, Sir. This is the only way that we can give them an understanding of who we are!"

Harding looked at Tularea. She looked at Harding, then looked at the image of the Seaworms in their Whitherstream on the vidscreen, then looked back to Harding. She nodded.

"OK. But read-only!" Harding switched the com back on.

"Theresa?" Thula's voice was searching, uncertain.

"I'm sorry, Thula," Mathers replied. "We had a brief discussion here about how best to give you access to our computers."

"Computer," Thula said with a touch of confusion in his voice. "What is computer, Theresa? What will I learn from getting access to your computer?"

"A computer is a device..."

"Devices!" Thula objected. "You seem to have quite an array of devices, Theresa!"

"Yes, Thula," Mathers replied. "We are not like the Valencriara. We are not blessed by a Whitherstream. Our ancestors had to work very hard just to survive. We build devices to make our survival easier."

"And to listen in on the conversations of others," Thula observed. "But you were telling me about your computer."

"A computer is a device that we use for storing information and for solving problems. It contains a full record of our people's history. It can show you who we are, where we come from, and what we are like. We are willing to give you the ability to read anything you like from our computer in exchange for the opportunity to ask for your help."

A long silence. Mathers could hear a faint humming in the background--the meditation of the Valencriara. Harding had a distressed look on his face; Vena's face, by contrast, was pacific, almost serene.

"Allow us access to your computer," Thula said at last. "Give us some time to evaluate your histories. Then we will decide whether or not to answer your questions."

Mathers looked at Harding. Harding scowled, looked at Vela, then back to Mathers, then nodded.

"Very well," Mathers replied. "It will take us some time to adapt the computer so that you can access it. I will let you know when it is ready."

Actually it took Mathers and Tularea only a few minutes to configure the probe to route questions posed by the Valencriara through to the computer. When it was ready Vena and Theresa joined Harding on the bridge.

"Thula, the computer is ready to receive your questions now."

Thula made deep inquiries in the history, Uriallannu read extensively in the literature and philosophy libraries, and Nortolinnta devoured the mathematics libraries with tremendous speed. A fourth Seaworm immersed himself in the music files. None seemed the least interested in the technology libraries. But the conversation that one of the Valencriara had with the Computer-- Yllerian was his shortened name-- seemed very strange.

"So Computer," Yllerian asked, "do you mean that the Whitherstream is actually an oblate torus? Approximately?"

"Approximately, yes," the computer replied.

"And what is above the Whitherstream?"

"The atmosphere of the Zeta planet extends roughly 10,000 kilometers above the Whitherstream."

"And what is 'atmosphere'?"

"The atmosphere is a gaseous mixture of hydrogen, and helium, methane, and oxygen."

"What is 'Zeta planet'?"

"The Zeta planet is the sixth planet in the 2V45903 star system."

"What is a star system?"

"A star system is a collection of planets or asteroids in orbit around a star or a group of stars."

"What is a star?"

"A star is a spherical gaseous object of a mass greater than the Hamkeril limit."

"What is the Hamkeril limit?"

"The Hamkeril limit defines the minimum average density in kilograms per cubic centimeter for..."

"Alright, alright. That was the wrong question. What I really want to know is what is a star *qualitatively*."

"Unable to comply. Please state your question quantitatively."

"Hmmm," Yllerian mumbled. "Quantitatively, eh? How many stars are there?"

"There are approximately 245 billion stars in the Milky Way galaxy."

"How many planets are there in the 2V45903 system?"

"There are 15 planets in this system."

"Are there any galaxies other than the Milky Way?"

"Yes. Thus far more than 345 trillion galaxies have been identified."

"Do other planets in this star system have a Whitherstream?"

"The Eta and Kappa planets have high velocity atmospheric strata."

"Are there any Valencriara on either the Eta or Kappa planets?"

"There is no evidence of life on either the Eta or Kappa planets."

"How many planets in the Milky Way have life?"

"That is not known."

"Where does Theresa live?"

"Theresa Mathers has a house on planet Goridon."

"And there is no Whitherstream on planet Goridon?"

"No."

"Can you show me what planet Goridon looks like?"

"The probe has not been configured for visual transmission."

And so it continued for over an hour.

Chapter 14: Conversation

Chief Engineer Myron Barker entered Argov's office just behind Alicia Provanda, the Chief Technical Officer, and sat at the conference table. Brataachal Virinachk, the Operations Officer, Elehan Targov, the Chief Medical Officer, and Caralasham Orpilava the Security Officer, were also present. Argov looked solemnly around the room and reflected on the talent and achievements that had brought each of those present to the table. Alicia had won the Landokov Medal for Outstanding Achievements in Science and Technology at age 15 for her contributions in shield technology. The Klingon Virinachk had served for more than a decade as Chief of Operations an Alliance starbase close to the Iriscene border. Targov was a Vulcan who had served a dozen tours of duty as Chief Medical Officer on various Alliance starships. The Uralaschian Orpilava hardly looked dangerous; her slender frame, clothed in glittering silver, gave her the appearance of a human adolescent. But Orpilava had won the Uralaschian Personal Combat Championships five years in a row. And with her lightning fast metabolism, Argov knew she was easily the most formidable warrior on the base. Argov reflected on the fact that his crew was the finest the Alliance could assemble, as well it should be for a facility that was considered the most secret and the most important in all of Alliance space.

But even these extraordinary leaders felt overwhelmed when they arrived at the Alliance Arial base.

"I thought I knew quite a lot about shield technology before I came here," Alicia had told him shortly after her arrival. "But what I found here was far beyond anything I had imagined, even in my wildest fantasies."

Virinachk openly doubted whether or not he could make any useful contribution to the project.

"In my previous assignment I managed a base staffed by roughly 2,000 people," he protested. "But this! 50,000 people! 10,000 scientists and technicians! It is quite beyond my skills."

"Most of the 50,000 people on this base are feeling overwhelmed," Argov reminded him.

"As am I," he rejoined.

"Yes," Argov continued, "and the scientists and engineers among them are struggling to learn how to work with a design that was developed by the Federation more than 50 years ago, and how to work with other crew members such as I who don't really know what they are doing or why." Virinachk raised an eyebrow at this. "There is no one in the Alliance who has better or more pertinent experience for this task than you. If you can't do it, then no one else in the Alliance can."

Virinachk furrowed his brow, then nodded.

"Yes, Commander, you are right. I can do it, and I will."

He knew without question that his crew was talented and highly skilled. But this ripple effect-- what was it? Would the Alliance leaders think that they

had caused it inadvertently or otherwise? Was it a weapon? A prelude to invasion?

"Well?" he asked sharply. "What have you got?"

They all looked around the table at each other.

"It wasn't us, Sir," Alicia said firmly.

"You're certain?" he pressed.

"Yes, we're quite certain of that," Myron assented. "For one thing, we don't have enough power to generate that kind of effect."

"What do you mean?" Argov asked. "Isn't this the most powerful base in the entire Alliance?"

"Yes, it is," Virinachk concurred. "But we have received reports from a region more than 40 light years in diameter that experienced this ripple effect. Even if we knew how to cause such an effect, we simply can't generate enough energy from this facility to do it."

"Sir, our calculations show," Alicia continued, "that even if we were to extract the entire energy of our pulsar, we still couldn't produce an effect that is that broad."

"Will the Alliance concur with your analysis?"

"It's irrefutable. There's no mistaking it."

"Can you tell where it originated?" Argov asked.

"No Sir," Virinachk said. "We have asked the computer to infer a point of origin and it was unable to do so. Myron suggested that the ripples might contain a signal or a message. So we asked the computer to look for any message or signal using all known forms of encryption-- and it found nothing."

"Then... what *could* be causing it?" Argov asked.

They all looked around the table at each other.

"We don't know, Sir," Alicia said with resignation. "We don't know of any natural or unnatural phenomena that could possibly be exploited to produce an effect of such magnitude."

"Is there anything we can do about it?" Argov asked, though he was certain that he knew the answer.

"The ripples were experienced throughout the entire base," Myron replied, "even though our shield strength never wavered one iota. We believe that even if the shields had been 1,000 times more powerful than they are, it likely wouldn't have stopped the ripples."

"They seem to somehow have affected the geometry of space itself," Alicia continued.

"I thought only gravitation could do that!" Argov retorted.

"So did we, Sir," Alicia continued. "But this entire event is absolutely unprecedented in known Federation and Alliance history. It would appear that our former understanding of space and time has been rendered obsolete."

"Could it be a weapon?" Argov asked.

"If it is a weapon, it's not possessed by the Klingons, the Ferengis, or the

Cardassians,” Orpilava said. The others nodded their assent. “They all have the same problem that we would have in trying to implement something like this-- not enough power.”

“What about other residents of this region?” Argov pressed. “Would the Q’la’xans be capable of generating enough power?”

“Perhaps,” Alicia nodded. “But we have so little knowledge of the Q’la’xan Empire that we don’t presently know of any way that we could either prove or disprove that assertion.”

“But the Iriscenes are definitely not capable of this,” Virinachk declared.

Argov rose. “Then I want to prepare immediately to send our first message with the Communications Array. Is there anything that would prevent me from initiating our first transmission in 30 minutes?”

“We will be ready, Sir,” Myron said. The others nodded their assent.

“Very well, then,” Argov said with a nod. “Orpilava, I’d like you to stay for a moment. The rest of you are dismissed.”

The others rose and exited the conference room.

“Caralasham,” Argov said when they were alone, “I’m concerned that these ripples may be a prelude to invasion. I want to protect the base at any cost, and I want to be sure that the communications array doesn’t fall into enemy hands.”

“I understand, Sir,” Caralasham said with a slight bow. “I have a suggestion.”

“Go ahead,” he said.

“We set up a 4 hour countdown that can only be reset by either you or I. If neither of us reports within four hours, it starts the auto-destruct on a 1 minute countdown.”

“Excellent,” Argov said. “Do it. You and I will have to operate on staggered shifts until we can be sure the danger is past. I’ll work up a schedule and send it to you.”

Orpilava bowed slightly and slipped out through the door. Then Argov turned to his computer, wrote up the schedule, and forwarded it to Orpilava.

Next he wrote a status report for Admiral Norianna Triminol.

“We just experienced something quite extraordinary. For about 5 minutes all of space in and near the base was rippled! We have confirmed that this was in fact a subspace phenomena— one which could not have originated at the base. It has been reported from as far away as 200 light years so far. We don’t know the cause. We’ve convened a group of our top researchers to investigate it. We are using every available resource. We hope to have an answer very soon. I thought it would be prudent to speak to the Federation immediately about this matter, to keep them informed. So I’ve ordered the Hermes readied for immediate use. And finally, in case these mysterious ripples are some type of weapon, or perhaps preparation for invasion, I’ve taken the liberty of setting a timer which will automatically trigger the auto-destruct if either I or my Chief of Security fail to report within four hours.” He transmitted the document, then

boarded a turbolift to the Subspace Tunneling Communications Center.

“Sir!” Virinachk said sharply as he entered, and everyone in the room snapped to attention.

“At ease,” Argov said. “Myron, are you ready?”

“Yes Sir!”

“Then let's contact the Federation.”

Myron set the coordinates of the Federation Arial base and directed the image sensor toward Argov. Then he initiated contact and the vidscreen snapped to life. They saw a vacant room, very dimly lit.

“Hello... Hello...” Argov inquired. “This is Argov Firin, Commander of the Alliance Subspace Tunneling Communications Station. Is anyone there?”

They could just hear a siren sounding as if from a great distance.

“This is Argov Firin, Commander of the Alliance Arial station. Is anyone there?”

“I hear footsteps,” Alicia whispered.

“Yes, so do I,” Virinachk concurred

Suddenly the vacant room was flooded with light. A figure appeared at the entrance, then approached the vidscreen. It was a young uniformed man with astonishingly blue eyes. “Hello?” a voice inquired. “Who's there?”

“I am Argov Firin, Commander of the Alliance Subspace Tunneling Communications Station.”

“You... I... I'm Lieutenant Olson. Let me call Professor Mair. We weren't expecting you to call for another few days.”

“Yes, I know,” said Argov. “But we have something very important to discuss.”

“Ah, here's Professor Mair now,” the Lieutenant said with evident relief.

They could see a number of people rushing into the room behind a balding, bearded man.

“Professor Mair, allow me to introduce Commander Argov Firin,” the Lieutenant said as he directed his hand at the vidscreen. “He's the commander of the Alliance Hermes station.”

“Hello! I'm Professor Mair! We weren't expecting your call for another three days!”

“Right,” Argov said, “We were in our final countdown when I took it upon myself to call you earlier than scheduled. Something has come up.”

“Yes?” said Professor Mair, his interest obviously piqued.

“We experienced a very strange phenomenon just an hour ago,” Argov said. “It was as if space itself were rippled...”

“You experienced it as well!” the Professor said with amazement. “We must compare times, because it was felt throughout most of known Federation space. We've had reports from more than 100 star bases that have experienced the very same thing.”

“Oh, I see,” Argov said with evident bewilderment. “I... I had no idea!

We've had reports from stations that are up to 200 light years away, but across all of Federation space! How is this possible?"

Mair shrugged. "We don't know, But we're now faced with the possibility that this... this... phenomenon is really galaxy-wide. We just don't have any explanation that could account for something of that magnitude."

"Do you know if it's some kind of weapon?"

"Well, our best people have been looking at this, and they don't think it is. But they really don't know. Their best recommendation at this point is to take every precaution, but to keep an open mind."

"That's what we needed to know, Sir," Argov said. "May I suggest that we report hourly until we have reason to believe that we are out of danger?"

"Very good suggestion, Commander. I'll make sure that the Hermes is manned around the clock!"

"I'll have Alicia Provanda, my Chief Science Officer, provide what data we have on the ripple phenomenon," Argov said.

"That would be very helpful, Commander," Mair said with a nod. "Have her contact me when she is ready. All scientific research teams in the Federation have been put on full alert until such time as we have an answer for this phenomenon. I look forward to hearing from her."

"One more thing," Argov said. "We are still expecting to test the Subspace Tunneling Transporter. In light of recent events, perhaps we should try to run the test sooner rather than later."

"Wonderful suggestion!" Mair enthused.

"How soon can you be ready?"

"We are nearly ready now. We were merely waiting for the time when we could talk to you."

"What about tomorrow?" Argov asked. "Would you be ready then?"

"I believe so, yes," Mair assented. "We will let you know if anything comes up that might interfere with that schedule."

"Wonderful, thank you Professor. Firin out." And the vidscreen went dark.

Chapter 15: The Transporter Test

Early the next morning Professor Mair returned to his office and asked the computer to display the Transporter project plan. The ripples and novas had diverted the talents of most of the crew. But Mair had managed to keep the core group focused on the calibration and software verification necessary to bring the transporter online when the Alliance team was ready.

There was a ring at his door.

"Come!" he called from within.

Sara Thoms entered and found his quarters in utter disarray-- plates with bits of food poised precariously on chair arms or on teetering stacks of books; clothes lying in rumpled heaps on the floor; papers strewn about everywhere.

"Sara! Welcome! Here, let me clear this junk away..." The professor grabbed a pile of books and papers and other unidentifiable sundries that filled a chair and turned left, then right in search of a spot that might accommodate the entire heap. At last he shrugged and sat down in a chair and plopped the whole thing on his lap. Sara took the empty chair, after pausing just long enough to sweep away a few crumbs, and gazed at him with dark, mysterious eyes. For a moment the professor could feel himself being drawn into them, like a planet sinking in the gravity well of a dark star.

"What may I do for you?" he asked warmly and with no trace, he hoped, of the fascination he felt.

"I want you to know that we have finished the calibration of the transporter."

"Excellent!"

"We still have the synchronization to do, but of course we can't begin that process until we have both stations online. Now that we know the Alliance Ariel station is close to being ready we believe that we will be ready to power up both terminals to begin synchronization within the hour."

"Very good," Mair said. "Let me know when both systems are up. I want to be in the control room when we begin synchronization."

Thoms nodded, then rose and glided toward the door. But she stopped before it opened and turned toward Mair.

"Excuse me for saying so, Sir," she said, "but it looks to me as though you could use a housemaid."

"Oh, uh, why, uh, yes, I suppose I could" Mair agreed with some embarrassment. "I've been so absorbed in keeping Starfleet happy that I've neglected all domestic duties."

Sara smiled mysteriously, then went through the door. Curious, Mair thought, how interested she seemed in the mundane aspects of his personal life.

#

Like so many of his classmates he had long ago decided to submit to something known colloquially among Academy cadets as "the Treatment"-- a devilish concoction that subdues the libido. Success in the Alliance is usually

easiest to attain when one's life is not complicated by romance. The Treatment had permitted him to concentrate his attentions on academics, rather than on the too-alluring flirtations of young ladies. As a result of his single-minded devotion to his studies he had become a full professor at the age of 20. By 25 he had achieved considerable renown for his work in warp drive stabilization. Now at 32 he was Commander of the most important research facility in the Federation. He was working on the most exciting, the most challenging, the most significant project in the entire Federation-- and despite the stress and the occasional demands of an overbearing admiral, he thoroughly relished the opportunities that the Alliance had afforded him. He was certain that in another few years he would make Admiral. Quite a success story for a young orphan in a far-off outpost who had witnessed the murder of his mother and father by rebel Klingons when he was only three.

But there were times when he would trade it all for quiet domestic life on some forgotten planet with a plot of land, a comfortable residence, and the tender devotions of a family. Life on a star base-- especially a top secret facility such as X98VS, the Federation Ariel-- has a certain sterility. Its scientific purposes may be thrilling, its personnel brilliant and vivacious, but there are no families, no children, and those personnel who have families are typically on the base for 6 to 12 months at a stretch.

The base's conservatory has a vast array of plants of every kind, but it's a highly artificial environment, and highly controlled. One can't loll about on a patch of turf in the conservatory and gaze idly at the sky-- it has no lawns and the "sky" is nothing more than an illuminated ceiling. The holodeck has a wonderful fishing program with simulated whitewater in a verdant evergreen wilderness. The fish are feisty, and one can wade through brisk waist-high currents that thunder down a riverbed of house-sized boulders. But there won't be a drop of water on you when you leave the holodeck for your quarters.

The Treatment was painless, but it required monthly injections-- and there was a moderate risk of complications affecting the limbic system that require continual monitoring by a physician. More than once he had considered discontinuing his monthly visits to the physician-- and not only because the base's Chief Medical Officer, Dr. Lauren Roberts, took every opportunity to express her profound distaste for The Treatment. She warned him every month of the potential risks to his health, and of the long term risks to his social life. But standing Starfleet orders required every physician in the Starfleet to provide The Treatment to any officer who asked for it. And every month she grudgingly complied.

Mair had met Dr. Roberts's husband, Commander Gene Roberts, and their two sons Gabriel and Martin a year ago when they were on leave at Starbase 1394. Commander Roberts was the base commander, and both boys were in the Academy. He and the good Doctor were dedicated Starfleet officers committed to their careers, hard working, and devoted parents who had obviously found the time and energy in their busy professional lives to raise two boys both of whom were now exceptional students.

Mair met privately with the Commander one evening to discuss a few

operational matters. After they had talked for some time, Mair complimented Roberts on the quality of his wife and family.

"But tell me," Mair asked in an undertone, "you don't see each other for six to twelve months, and then only for a couple of weeks at best. How do you manage to keep your marriage intact?"

"We communicate daily by subspace radio," he said. "There's a four and a half hour delay, but we make a point of speaking every day. It's my little reward every evening after a long day."

"For myself," Mair confessed, "I've been on The Treatment since I was 16. It's given me the ability to focus on my career to the exclusion of domestic aspirations. But the cost, of course, is that I'll probably never experience what you and Lauren have found in each other."

"Truth is," the Commander replied with some anxiety, "I couldn't make it through those six month sabbaticals without The Treatment. She'd be outraged if she knew..." Then he scowled; and Mair threw up his hands and waved them frantically to indicate that he would never dream of mentioning the Commander's secret to the Doctor.

#

He spent the next half hour tidying up and thinking about Sara's voice, her soft lustrous eyes, her fierce intelligence. He thought perhaps he should invite her to dinner sometime.

"Professor Mair," Sara's unmistakable voice broke in over the com system.

"Yes Sara," he replied as congenially as he could.

"We've contacted the Alliance Ariel and we're ready to begin synchronization."

"I'll be right there."

The Transporter room was windowless and quite small. Since the transporter was redesigned for objects no more than 1 cubic meter in size, it was unnecessary to construct the huge hanger capable of housing an entire starship that was envisioned in the original design. A gaping void in the architecture of the starbase indicated where the hanger bay would go when-- and if-- the theoreticians at Starfleet were able to solve the dual problems of stabilization and synchronization that rendered the original design impossible.

The room had a workstation that housed the transporter's control panel, a small platform for the object to be transported, and a large vidscreen on one wall that was connected to the Hermes and to the station's standard subspace communications system. A select group of a dozen or so crew members crowded the room: Verliac and Bralton were both present. And Sara, who greeted Mair with a smile as he entered.

"Welcome, Sir," she said with what he interpreted as an invitational warmth; and again he felt a twinge of what he thought must be infatuation.

Alicia directed a vidcamera at Mair as he moved to the center of the room. And on their own vidscreen they could see the image of Argov Firin and his chief engineer Myron ???.

“Good day, Commander Firin,” the Professor said. “I understand that you are ready to begin synchronization.”

Argov nodded. “Indeed we are, Professor. You may begin any time.”

Professor Mair nodded and Sara Thoms touched an icon on her control panel. At the bottom of the vidscreen a band displayed the synchronization signal in real time.

“The signal strength is strong,” she said. “And now we are in sync!”

Cheers erupted in the little room; and on the vidscreen they could see the Alliance team high-fiving.

“This is a momentous occasion,” Mair declared in his stentorian baritone. “We are about to realize the aspirations of researchers who have worked tirelessly for more than a century. This day we throw open the doors to a new era of space travel!” He nodded toward Alica, who trained the vidcamera on the transport platform. There, in the very center, was a small gray bust of Arial Sirchian reconstructed from the only known photograph of him to have survived the obscurity of his life. “Then, Engineer Morvachial, let's power it up!”

“Yes, Sir!” barked his Chief Engineer Danver Morvachial from behind the workstation. He pressed a button and there was a deep hum followed by a loud snap-- and without the slightest flash of light the bust simply disappeared from the transporter platform. All eyes turned to the vidscreen where they saw displayed the platform of the Alliance base. But what appeared on the platform bore no resemblance whatsoever to the bust. It was an incoherent mass that appeared to occupy the same volume, but was punctuated with thousands of cavities, twisted, distorted, discolored.

There was silence throughout the room.

“Well?” Professor Mair asked. “What happened? Any ideas?”

“We'll have to investigate, Sir,” Danver said. “Although...” He studied the instruments on his console, then entered a few commands and brought up a chart on the vidscreen. “Here's a profile of the matter stream as it was transmitted from our base.” He touched a few more icons on his control panel and another graph was superimposed over the first. “And this is the matter stream as it was reconstituted at the other end.” The two graphs clearly diverged widely.

“So... the error is on the Alliance side?” Professor Mair asked.

“Yes, Sir, it is,” Danver said. “And not only that, I think we can find the cause.” He touched a few more icons on his control panel. “Watch what happens when I take account of the precession of the Alliance base's pulsar.” He touched the console again and the two graphs merged.

“But the base's stabilizers are designed to counteract the pulsar's precession!” Irina objected.

“That's true,” Danver said. “But it appears that something is wrong with your stabilizers.”

“How do you know that it isn't your base's stabilizers that are the problem?” Irina retorted.

“Well, let's see,” Danver replied. “First I'll compare the Alliance matter stream to the ideal matter stream.” He touched a sequence of icons on his control panel and first the vidscreen displayed the Alliance matter stream in blue. Then he displayed the ideal matter stream in red. The two graphs diverged. “The Alliance matter stream is in blue and the ideal matter stream is in red. Now I'll display this base's matter stream in green.” He touched another icon and the green graph exactly matched the red graph.

“Then it appears, Argov, that your engineers have some work to do to figure out why your matter stream diverges from the ideal,” Haywood said.

Argov pursed his lips and scowled. “So it would appear,” he grumbled. “We'll be in touch.” And the Alliance image snapped off.

Chapter 16: Images

"Thula," Mathers ventured. "Do you... are you... Are you satisfied with what you have found?"

It had been more than an hour since they had granted the Valenciara access to the computer system. In that time the Valenciara had accessed virtually all of the mathematics available, much of the history, and quite a bit of the recorded music. But they had sampled nothing of the engineering or science databases, and showed scant interest in any form of art that didn't involve music. What impression had they formed of the Alliance, Mathers wondered?

"Thula? Are you there?"

"Yes, Theresa, I am," came the digital rendering of Thula's speech at last.

"Have you found what you were looking for in our histories?" Mathers asked anxiously.

"Ah, Theresa, yes-- I have found a great deal-- far more than I could have expected."

Theresa chewed her lip. "So... are you ready to talk to us now about the image you found?"

"Your people have many songs, Theresa, and many histories. But so much of your history is violent and discordant. There are many tales in your histories in which your people have taken advantage of other beings less powerful or fortunate than you. Your people seem very hostile, Theresa. I don't know that the Valenciara can trust you."

"I... I understand, Thula. I know that my ancestors have done some very terrible things. But I would also hope that you have noticed that since the founding of the Federation, our people have been forced to learn cooperation. When we were just one dominant species on a single planet, we fought bitterly among ourselves. But as we ventured out into space we realized that we would have to cooperate with other species just to survive."

"But the Federation has gone to war against the Borg, against the Dominion, against the Klingons," Thula continued. "The Valenciara do not war with others. The Valenciara are peaceful and content. We do not embark on campaigns of conquest. We do not indulge in bellicose denunciations. We do not..."

"You don't have the same threats that we have!" Theresa objected. "The Borg had assimilated trillions of people throughout the galaxy long before we ever knew of their existence! The Dominion was determined to conquer the Federation! The Federation went to war against the Borg and the Dominion solely to defend the freedom that our people had enjoyed for more than two centuries! Your people should be an inspiration to everyone in the Federation. You are peaceful and serene and very intelligent. Your lives are dedicated to your music, your history, and to mathematics. But you also live in an environment that protects you from invasion. The Borg would never be interested in assimilating the Valenciara-- because of your environment. You

don't have anything that the Borg would want. You simply don't have the same threats that we have.”

“That is true, Theresa. Your people have had many trials. And as you have said, you have faced dangers that are not a hazard to the Valencriara. But the Valencriara will still see the violence of your past and find that very hard to understand. The Valencriara are like children, Theresa. They will read your many histories and will see much that they cannot understand. But the violence they will understand, and they will find it very distasteful.”

“Thula, you are obviously very wise. I now realize that I am very fortunate to have spoken first to you, of all of the Valencriara. You must realize that the problem of the ripples is something that the Valencriara are not going to be able to solve by themselves. You must realize that the source of the ripples comes from far beyond the Whitherstream. If we are to solve this problem, Thula, then you are going to have to help me. You need me, and I need you.”

There was a very long pause while Theresa waited for a reply. Her heart was pounding. She looked up at the monitor that displayed the signal received by the probe— the one that gave her the idea that the Valencriara were singing— and saw that most of the others were now silent. Were they listening in to her conversation with Thula?

“Continue,” Thula said at last.

Theresa exhaled long and slow. “We have had many trials, as you have said. And many of them have been against enemies much more powerful than we. The Borg very nearly defeated us, as did the Dominion. I hope you saw how brave were the many people that defended the Federation. I hope you saw how many gave their lives to prevent the Federation from being assimilated by the Borg or from being conquered by the Dominion. My own father gave his life to help the Uralaschi defend themselves against the Plarestans. He didn't have to stay on Uralaschi. He could have gone back to the safety of the cargo ship. But he believed that it was more important to help the Uralaschi defend against the Plarestan attack. And...” She stopped for a moment to take a breath. “And it cost him his life.”

Theresa paused briefly to listen for a response from Thula. But there was none.

“Our past has been very violent,” she continued. “Our stories and our histories are replete with violence. But they are also filled with tales of brave and honest people who have worked very hard to preserve our freedoms.”

Again a silence. Theresa looked up at the monitor displaying the communications of the Valencriara. There was a great deal of chatter— not music this time. They were obviously discussing what Theresa had said.

“We are agreed, Theresa,” Thula said at last. “We will help.”

“Wonderful! And we will do everything we can to prevent whatever power the ripples represent from harming the Valencriara. I have heard the Valencriara talk about images that they were able to find encoded in the ripples. We have tried, but we were unable to find any images at all. So we now realize that the Valencriara have much greater skills in mathematics than do we. I wanted to ask

for your help in finding and viewing these images, Thula. Will you help us?"

"I am surprised, Theresa, that you were unable to find the images," Thula replied. "The mathematics involved is somewhat sophisticated, but nothing that is beyond the reach of a well-schooled Kirren. Certainly, Theresa, we would be happy to help."

"Oh, thank you Thula! Now, I am not a mathematician, so I'm going to have to ask you to explain how to find those images to our computer. But first I'm going to have to make it possible for our computer to record what you tell it. This should take me a little while to do. OK?"

"Very well, Theresa, we shall wait."

Theresa rushed to the ship's bridge. Harding looked up from the helm. Vena was sitting next to him.

"Are we about done here?" Harding asked.

"Are you kidding?" Theresa rejoined. "I've just gotten the Valencriara to agree to help us decipher the images that they found in the ripple effect."

"Too bad. We've just been ordered to return to Starbase 23."

"But..." Mathers gaped at Harding. "But you said we could solicit their support!"

"Yeah, well I was sick at the time. Besides, I only authorized allowing the seaslugs..."

"The Valencriara!" Mathers insisted.

Harding threw his arms in the air. "Whatever! I only authorized giving them access to the computer-- which we did! And now you've just told me that they're done, so now we can leave!"

"But Sir!" Mathers blurted.

"Aaaah!" Harding said with his index pointed toward the ceiling. "Not another word! We're leaving just as soon as Vena finishes getting the computer disengaged from the probe."

"Just 30 minutes, Sir!" Mathers pleaded. "That's all it will take me to get the computer configured to record the mathematics they used to find the images!"

"Why don't you just have them *tell* you how to find the images?" Harding asked.

"Because I'm not a mathematician, Sir! And I wouldn't understand anything they told me! We need to record the mathematics in terms that a mathematician would understand, and that means giving them the ability to record their mathematics in the computer's working storage area!"

Harding glowered at Mathers, then looked inquiringly at Vena. But Vena simply smiled alluringly and said nothing.

"Sir," Mathers continued, "this is really important! I'll bet that the reason that we've been called to Starbase 23 is that Alliance Command thinks that the ripple effect we experienced is some kind of new weapon, maybe, and they want to begin preparations for war." Harding stared sullenly into Mathers' eyes, then glanced over at Vena— but said nothing. "And so I'll bet that Admiral Xantuhra is

going to be asking if anyone has any idea what caused the ripple effect. Wouldn't it be very impressive if, out of the entire fleet, ours were the only crew that was able to come up with anything at all?"

Harding stared sullenly at Mathers. Mathers could see that he knew she was right— but, typically, he was just too stubborn to admit it.

"Look, Sir, this may be our one chance to figure out what caused the ripple effect. I'm open to other suggestions, Sir, but I just don't think there's any other way to get the information we need."

Harding stared sullenly a while longer, then finally gave a short nod.

"Thank you Sir, thank you," and she turned for the door.

"Thirty minutes is all you get!" Harding shouted after her.

Mathers ran back to the engineering workstation and set to work on configuring the computer to accept input from the probe and to write the strange mathematics of the Valencriara to a working storage area. She could only hope that the computer would be able to store it in a form that would make sense to an Alliance Academy mathematician. She struggled a bit with the user permissions— it had been a while since she had done anything like this.

"One thing about the Academy," she whispered to herself, "they do prepare you to handle unusual situations."

In one of her training exercises her shuttlecraft crashed on a desolate planetoid with enough food and supplies for only a few weeks. The engines were ruined, and so was the communications equipment. But the computer was intact. Her only hope was to scavenge parts from the com system and somehow marry them with parts from the computer to send out a distress signal. She figured it out, and it caused her to reflect once again on the importance of being resourceful.

"There!" she said when she had gotten everything set up. "We're set!" Twenty minutes to go. She hoped the Valencriara could explain their mathematics in that time.

"Thula!" She said through the probe's com link. "Thula, are you there?"

"Yes, Theresa," came the computer's metallic rendition of Thula's voice. "We are here."

"I have everything set up for you," she said. "All you have to do is explain the mathematics of how you found the images to the computer and it will store everything you tell it."

"Oh, is that all you wanted?" Thula replied. "You didn't have to go to all the trouble of setting up your devices to do that. I could just as easily have explained it to you!"

"Uh, well, to tell you the truth, Thula," Theresa stammered, "you could, but it wouldn't do any good. I'm not a mathematician, and anything you told me would be nearly impossible for me to understand."

"Oh," Thula said in a tone that the computer rendered as vaguely puzzled. "So then not all humans have skills in mathematics?"

"No, Thula, we don't, and I only know enough mathematics to know that

your mathematics is way beyond me. I'm just hoping that your mathematics will be understandable to our computer or to our own mathematicians. So, if possible, I would appreciate it if you could explain your mathematics as if you were talking to a child."

"Very well, Theresa, we shall do so."

Theresa monitored their conversation with the computer for another fifteen minutes while the Valencriara described their mathematics. A few words and phrases made some sense, but most of what they said sounded like gibberish to her. She monitored the working storage area and found that indeed it was recording a vast quantity of information, none of which looked the least bit familiar.

Then there was a long silence. Theresa noted that nothing new was being recorded in the working storage.

"Thula? Thula, are you done?"

"Yes, Theresa, we have explained the mathematics of the encoding of the images as simply as we can. We hope you will be able to make good use of it, Theresa."

"We will do our very best, Thula! But now I must go. We've been summoned to return to our base."

"Will you be coming back?" Thula asked.

"Yes, we will, Thula," she replied. "And I wanted to know whether or not you want me to remove the probe."

"The device that you sent into the Whitherstream to enable us to communicate?"

"Yes, that's it exactly."

"What will it do while you are gone?" Thula asked.

"It will continue to drift through the Whitherstream and to monitor its surroundings. It won't talk to you, it won't change its altitude, and it won't interfere with the Valencriara. But when we return it will be possible for us to communicate with you immediately."

"Very well, then," Thula said. "You may leave your probe here."

"Thank you Thula! I am indebted to you! And I hope that one day we are able to return the favor. Goodbye-- and I hope we are able to return very soon!"

"Goodbye, Theresa," Thula said. "And best wishes."

Theresa disconnected the com from the probe. She had what she needed-- now to see if the computer could make sense of it.

"OK, Captain," Theresa said, "we've got what we need. We can leave now."

"Roger that," Harding said indifferently, and Theresa could just feel the slight surge of the inertial dampeners as the ship left orbit.

"Computer," Theresa said, "using the mathematics recorded in the working storage file Valencriara-Mathematics, can you find the images encoded in the ripple effect of two days ago?"

“Working,” came the monotone response. The computer continued its analysis in silence for two minutes, then three. Vena Tularea walked through the door just as it replied “1437 images found.”

“Wow! It worked!” Mathers enthused. She gestured to a seat beside her, but Vena shook her head and remained standing. “Please display the images on the vidscreen.”

“Unable to comply.”

“Computer, specify the error,” Mathers insisted.

“The images are in an omnipresent format.”

“Omnipresent? What does that mean?”

“Each image shows an object in views from all directions simultaneously.”

“Really? Wow, that’s... amazing! Is it possible to give me a two dimensional view of these omnipresent images.”

“Working,” the computer promised again, and again it continued its silent calculations for two minutes, then three, then four. At last the vidscreen filled with an image that was confusing— even unsettling. Vague, diffuse scintillations of intense color writhed and twisted against a background of white clouds tinged with faint blue. There were sounds, but to Theresa it was nothing but noise— great deep BAROOMs interrupted with high-pitched screees, and an ever-present and most annoying scratching sound. She fast-forwarded through the image but she could see nothing comprehensible. She guessed that the entire image must cover several months of recordings. Was there some select moment out of all that recorded stretch of time that actually reports something useful?

She switched to another of the images. This one seemed to show a structure of some sort— a ship, perhaps? It was difficult to tell— but it appeared to be drifting among the blue-tinged clouds. She turned the image around to see it from various perspectives. If it were indeed a ship, it was unlike any she had ever seen. It seemed strangely complicated. The surface, if that’s what she was seeing, seemed... woven. Whereas in the previous image there was a constant swirl of activity, in this image there seemed to be no movement at all. She zoomed in on part of the structure’s surface— and then noticed something in the surface. Smaller structures that seemed to be moving, or at least changing color. *Fascinating*, she thought, *but it tells me nothing about the ripples*. She sped forward through the image, but again could see nothing that she knew how to interpret. And again it seemed to cover an immense stretch of time.

She randomly selected a third image. This one appeared to be inside a vast room of the structure she had seen in the previous image. She zoomed in toward part of the surface and indeed saw again the changing points of color she had seen in the previous image. She fast-forwarded through the image but saw nothing the least bit illuminating.

“This is hopeless,” she groaned. “Computer, of the 1437 images, are there any that contain images of a recognizable life form?”

“Yes,” came the disinterested reply.

“Well, please show them to me!”

Vena looked quizzically at the image of the strange structure. The vidscreen cleared and next Mathers saw what appeared like smoke, then the figure of a rather tall man emerged and faced the screen. Vena gasped and immediately fell to her knees, bowed, and touched her forehead to the floor with arms outstretched before her. He had blond hair and icy blue eyes. It appeared that his ship was under attack, as the sounds of weapons fire could be heard in the background. And yet the man appeared calm, almost disinterested.

“I am Executive Officer Willard Decker of the USS Enterprise,” said the figure. “We are under attack by beings who are implacably hostile to us. We tried to extend our hand to them in the friendship of explorers, but they have interpreted our every gesture as an unwelcome invasion of the sanctity of their space. This universe...”

A loud BAROOM interrupted from somewhere off screen. Decker turned to look toward it, then turned back with seeming unconcern. “This universe has physical laws that are very different from those of the universe we left. Gravity is different here. Because of the differential between the two universes, they will appear...”

Scintillations of intense color could be seen penetrating the walls, and at each entry point the walls seemed to disintegrate. One of the writhing scintillations bored through Decker and he was killed instantly. Blue-tinged clouds filled the air. The BAROOMs grew in intensity, with frequent interruptions of high-pitched scree and a constant din of what sounded like fingernails scratching a chalkboard. There were discharges of what appeared to be electric current, then a series of shudders as more of the walls disintegrated, then finally an immense explosion and the screen went blank.

Mathers looked down at Vena, who was reciting something— a prayer perhaps? Vena finished, then sat up with her head bowed and hands folded over her breast. She bowed three times toward the vidscreen, then looked up into Theresa's eyes and Mathers saw that streams of tears flooded her cheeks.

“Vena-- do you know who this Willard Decker is?”

Vena winced. “We call him the Honored One,” she said softly, and she bowed her head again.

“So... your people – you know who he is and you... worship him?”

“Yes.”

“Who is he?”

“A long time ago the Starship Enterprise was sent on a mission to defend the Federation against an enormous ship that approached from the far reaches of the galaxy. The ship had tremendous power, and every ship that had ventured to either greet or attack it had been destroyed. Willard Decker was Captain of the Enterprise, but Admiral Kirk took command. They found that the entire ship had been designed and built by machines. The ship had found an early Earth probe named Voyager that showed the location of Earth, and the ship had simply followed the map to Earth. The probe had been damaged. The name painted on its hull read 'Vger' because the letters 'oya' had been blotted out, and that is how the alien ship identified it. When the crew of the Enterprise proved that they were

able to communicate with the probe, the ship acknowledged Earth as the planet of origin of Voyager. The ship then took Decker on board and followed him into unknown dimensions." She bowed her head and sobbed briefly. "And now he's gone!" she wailed. "The people of my home planet believe that he had ascended to a higher plane of existence. We believe that someday he will return and lead us all on a journey to a realm of transcendent beauty." She looked up again and wiped her cheeks with her palms. "I'm sorry, but it is so terrible to see a man my people have revered for more than a century killed so brutally, so coldly." She struggled to her feet and collapsed in the chair at Theresa's side.

"Captain Harding, Sir," Mathers said into the com, "you'd better come see this." A minute or so later Harding and Troch both appeared at the door. Mathers replayed the image of Decker's demise and summarized what she had learned from Vena.

"So Captain, Sir, I think we had better send all of these images to Starbase 23 now, rather than wait until we get there."

"Don't worry, Mathers. I'll make sure they get it."

Mathers looked for any indication of disingenuous deception. Then she shrugged. "OK," she said, and she retreated to her quarters.

When she was gone, Harding wrote a message to Starbase 23 Base Command.

"This is Captain Harding of the Rim Quest. I have information about the ripple effect. Our engineer Theresa Mathers was studying the Zeta planet of 2V45903, the system we have been exploring for the last few days. The planet is a Class D ball of frozen gas. She thought she saw some life forms in one her scans, so she launched a probe. When she discovered some aliens deep in the planet's ocean, she made First Contact with them by linking the probe to the Universal Translator. Apparently these aliens have a good understanding of mathematics. They were able to identify an image encoded in the ripple effect. She wanted to get them to trust us, so while I was incapacitated she decided to give them access to the computer so they could evaluate us and our history. When they agreed to help us, she allowed them to write to the computer's storage area. And that's how they recorded the attached message. I emphasize that she did this without my authorization. I respectfully submit that she should be arrested for Court Martial on our return. We expect to arrive at Starbase 23 in another 3 days. Captain Harding out."

He attached the file of the Valencriara's mathematics and sent the message to Starbase 23.

?? Move the Transporter Test chapter to here?

Chapter 17: Trapped!

Mathers returned to her quarters and immersed herself in the idle diversions of Detective Swain. But as she had worked frenetically at acquiring the knowledge of the Valenciriara for almost three days without rest, exhaustion soon overtook her and she fell into a torpid sleep.

“Computer,” she groaned when she awoke, “what time is it?”

The computer gave her a time that was almost 18 hours later. She yawned, she stretched, she tried to order the vague recollections that had crowded her sleep of swimming in a vast ocean and talking to whales. And then she discovered that she was very hungry. She staggered toward the door of her quarters, thinking she would go to the ship's mess for a hot breakfast. But she smashed into the door and fell backwards, then realized with astonishment that the door hadn't opened.

“Hmmm, maybe the sensor is out,” she muttered. “Computer, open this door.”

“Unable to comply,” came the computer's annoyingly unemotional response.

“Why?” Theresa demanded.

“Engineer Theresa Mathers has been confined to quarters,” came the disinterested reply.

“Oh?” Mathers said with rising anger. “By whose order?”

“By order of Captain Harding.”

Mathers tapped her com badge. “Harding!” she yelled. She tapped her badge again, then realized that it wasn't opening a connection.

“Computer, where is Captain Harding,” she demanded.

“That information is privileged,” the computer informed her with aggravating indifference.

“Privileged!” Mathers yelled. “Privileged, is it!” She tapped her com badge again and yelled “Bridge!” But then she remembered that her badge had been disabled. “Computer, send a message to Captain Harding. Begin message. What's going on? Why have I been confined to quarters? Why has my com badge been disabled? Am I being held prisoner? WHAT IS GOING ON? End message.”

“Message sent,” the computer said flatly.

“Yeah, thanks for nothing.”

She sat at the desk built into the bulkhead and touched her computer terminal. She quickly determined that Harding had restricted her computer access as well— she was only able to browse at Security Level 0, the level that would normally be assigned to an untrusted guest.

She asked the replicator to give her a breakfast of cereal, juice, and toast

with jam and noticed with glum recognition that the utensils she was given were too flimsy to serve as either tools or weapons. She took it to her desk and chewed indifferently. When she finished she returned again to Detective Swain but found she was unable to focus on the plot. She kept wondering why Harding had confined her, what he was planning, what he might have told Starbase Command.

She took a quick shower, then flopped down on her bed and stared blankly at the ceiling.

"Mathers!" Harding's voice came over the com. "How's everything?"

"Just great," Mathers growled. "Why have I been confined to quarters?"

"Don't blame me!" he said with a broad grin. "It's on the order of Starbase Command. I told them what happened on 2V45903 and they ordered me to confine you to quarters until we arrive at the base."

"What did you tell them?"

"Now relax. It'll all come out at the hearing."

"WHAT hearing?"

"The hearing for your Court Martial," Harding said with an abundance of cheer. "Surely you didn't think that you'd be able to violate the Prime Directive with impunity, did you?"

"I did so with YOUR approval, Sir!"

"That's your side of it," Harding sneered. "In any case we'll be arriving at the base soon. I'll let you know when we've arrived."

"Great." The com went silent. She flopped back down on the bed and stared vacantly up at the ceiling. Harding was setting her up to take the fall for violating the Prime Directive. In a hearing it would be his word against hers, and there was really no way she could win. It was very frustrating. She tried to think of a way to present her case, she tried to think of how she could prevent Harding from ruining her career. She had promised herself when she joined the Alliance that she would never allow herself to feel frustrated, never to feel inadequate... But this! What would she do? What could she do? A single tear welled in her eye and she blinked hard to stop it. But soon it burgeoned to a trickle, then a torrent.

Chapter 18: Starfleet

Harding chortled to himself, then noticed that Vena had observed his exchange. He looked over at her and smirked, then she smiled back and together they laughed heartily.

“She won't stand a chance at the inquest,” Harding gloated. “They'll roast her...”

“Sir,” Vena interrupted, “Sir, there's a communication from the Starbase.”

Harding looked at the console and noticed that indeed there was a light indicating an incoming message-- Priority 1. He touched the com panel.

“This is Base Command from Starbase 23,” came the wooden voice. “You are to divert to the following coordinates immediately. Identify yourselves when you arrive and you will be granted docking rights.”

Harding read the coordinates and nodded to Vena. “Set a course for these coordinates and let's get going,” he said with disappointment. He had been looking forward to leave on a Starbase. “Warp 8.”

After a moment Vena turned to him with a puzzled look. “But Sir, there's nothing there!”

“What do you mean?”

“There's no base at these coordinates, Sir!”

Harding checked the Alliance Master Registry and confirmed that there was not only no Starbase at those coordinates, but no known planet either. Just a neutron star-- something every Alliance officer knew should be given a wide berth. The electromagnetic field of a neutron star has enough power to shear the shields of a Federation battleship at full strength. Harding checked the Registry again. A ship's Master Registry is supposed to be updated every time it docks at a Starbase. That would have been at Starbase Nurana, just before they departed for star system 2V45903. Nope-- no base, no planet, nothing.

“Well, then there's probably a ship there waiting to meet us.”

“A ship that would grant us 'docking rights', Sir?”

Harding thought about that for a moment and realized that no Alliance ship would be large enough to allow the Rim Quest to dock with it. He shrugged. “Whatever. Just set the course.”

Seventeen hours later the Rim Quest approached the coordinates and Harding dropped out of warp. He settled into a standard orbit of about 100 million kilometers from the neutron star, the textbook distance recommended, and looked for signs of an Alliance vessel. The star system was quite sterile-- any planets that had once orbited the star would have been shattered by its violent collapse. According to the Master Registry, that would have been about 35 million years earlier.

“Open hailing frequencies, Vena, and let's identify ourselves.”

“Yes Sir.” Vena pressed the com panel and announced their arrival on all known channels. “But Sir, the coordinates we were given are much closer to the star.”

Harding waved his hand at the vidscreen image of the neutron star. "We're not going to get the ship cut in two by that thing."

Vena looked again at the image and magnified it. "Oh, look Sir!" She pointed to the vidscreen and Harding saw a spherical object orbiting the star that appeared to be bathed by the star's electromagnetic field. An immense tongue of radiant energy was channeled right into each of the object's poles. By everything Harding thought he understood about the laws of physics, that object should be torn to pieces— and yet there the object was, happily immersed in enough energy to pulverize a planet.

"Rim Quest," came a voice over the com, "this is Argov Firin, Commander of the Alliance base AB493S. Raise your shields to full strength and set the following course. We will provide protection from the star's electromagnetic field."

"But... Sir, your base isn't in the Master Registry."

"That's correct, Captain Harding," Argov replied. "The existence of this base is top secret. Set course and engage at one quarter impulse."

Harding thought for a moment. Should he trust this Argov Firin? Alliance Regulations state explicitly that no ship commander is to accept communications from anyone who claims to be located on an Alliance facility that is not in the Registry. But the orders he received from Starbase 23 were encrypted, and they were authenticated by the computer, so they must be genuine. And these were definitely the right coordinates.

"Raise shields and take us in," he said to Vena.

"Now disengage your engines," Argov said once they were in range. Harding nodded to Vena and she shut down the impulse drive. There was a slight lurch as an immensely powerful tractor beam grabbed the ship. Harding called Troch to the bridge and briefed him on their approach.

"We should be docking within the hour. I want you to accompany me to the base. We'll wear our dress uniforms, and let's make sure we have everything we need."

Troch clenched his right fist and crossed it over his powerful chest, then bowed and exited the bridge.

"And Vena, you stay here and make sure Mathers doesn't cause any trouble."

"Yes Sir."

When they finally docked, Troch and Harding left the Rim Quest and were received on the dock by a group of just three personnel, none of them in dress uniforms.

"Welcome to Starbase AB493S," said a stocky man with dark eyes and thick dark hair. "I'm Security Officer Thompson. This is Major Irene Palmer." He indicated a svelte woman with auburn hair and luminous blue-green eyes. "And this is Harmal Warpat, one of our many scientists. Please follow me."

"This base, this... it's not a starbase, is it?" Harding asked. "What is it?"

"I'll have to let the base commander provide the details, Sir."

"It's huge!" Harding enthused.

"Yes, it's about 10 times larger than a typical Starbase."

"And it seems to be drawing power from the neutron star," Troch deduced.

"That is correct."

Thompson led them down a short corridor to a door that opened onto a vast walkway some 500 meters in width.

"We call this the Grand Promenade," Thompson said. "It runs around the core of the station, and is 10 kilometers in diameter." They walked a short distance down the Promenade to a turbolift tube. The base was shaped roughly like a sphere pierced at its two poles by funnels that captured the electromagnetic field of the star and channeled it deep into the core of the base. The latitudinal turbolifts circumnavigated the base at its equator, but because the base was so enormous, there was a set of one hundred longitudinal turbolifts as well. Thompson directed them into the lift. They stepped inside and saw that it was unlike any other turbolift they had ever seen before— it had chairs with computer terminals. They each took a seat.

"Meridian 0," he said, and the lift started to move. "The base is so large that locations are referenced by longitude and latitude. Your ship is in a bay at longitude 70, Latitude 0. We are headed toward the base commander's office on the prime meridian. It should take us about 10 minutes to get to the right meridian, and then we will need to take another lift to get us to the right latitude."

"How many personnel are there on this base?" Harding asked.

"About 50,000," Thompson replied. "It's a completely self-contained facility. We have everything necessary for a small city here-- including farms, hospitals, fire departments, schools, holothaters, even parks."

Harding pressed for more information on the purpose of the base, on its relationship to the other bases of the Alliance, and on the source of its extraordinary design. "Look," he said, "this base is so different from any other Starbase I've ever seen that I have to wonder. It just doesn't seem like an Alliance base. Where did the design come from? Did we get it from another civilization?"

"I'm sorry, Captain, but I'm not authorized to answer any questions about the purpose or design of the base."

Harding scowled, fell back in his chair, then turned to his computer terminal to browse the news and information databases. He found a daily paper that was similar to those found on every other Alliance Starbase he had ever visited. There was a story about a lost toddler who had been found hiding in the underbrush of a park, another about decisions made by the School Board concerning the grouping of students in the base's three middle schools, and an editorial on the Rochelavi Treaty that the Alliance had just signed with the Plarestans. But of course nothing that touched on the purpose of the base.

When the lift finally arrived at Meridian 0, they disembarked and Thompson led them across a broad walkway to yet another lift. Thompson asked for Latitude North 75, and they sat in silence for another 5 minutes. When the lift

doors finally opened they stepped out into a short hall that had 3 security doors. Thompson placed his hand on a plate at the middle door . The door opened silently and he directed them inside. They found themselves in a small waiting room with a single officer at a reception desk.

“Security Officer Thompson with Captain Harding and Officer Troch from the Rim Quest to see Commander Firin,” Thompson said.

“The Commander will be here shortly,” the Duty Officer said. “Please be seated.”

They waited for what seemed an eternity. Harding stood up and paced, sat down with a scowl on his face, drummed his fingers, looked around the room, fumed in silence. Troch sat stoically and stared vacantly at the featureless walls.

Finally the inner door opened and Argov Firin strode in. Troch jumped to his feet. Argov extended his hand to Harding and shook it vigorously.

“I am Argov Firin, commander of this base,” he said.

“This is Captain Harding of the Rim Quest, and Security Officer Troch,” Thompson said. Troch gave a Klingon salute, crossing his fist over his chest.

Argov extended his hand to the Captain.

“Welcome aboard, Captain.”

“What a marvel this base is!” Harding enthused. “I have so many questions!”

“In good time, Captain. First I must learn what you have found on the planet you were exploring.” Argov next extended his hand to Troch, who took it in an iron grip.

“With your permission, Sir,” Thompson said, “I will return to my duties.”

“May I join you?” Troch asked. “In the interest of cooperation.”

“Sir?” Thompson asked Argov.

“Yes,” Argov replied, “that is exactly what I was going to suggest.”

And Troch followed Thompson back out to the hall. Casually, surreptitiously, unnoticed, Troch twisted the ring on his index finger.

“This way, please,” Firin said, directing Harding inside. They went through the door into a long hall lined with doors. They walked the full length of the hall and took the last door on the left, stepping into a room with several huge vidscreens and with what looked vaguely like a transporter. There was a crew of perhaps a dozen people in the room, most of them monitoring a puzzling array of devices. One female dressed in a silver suit and who was curiously small hovered just a meter or two from Argov.

“This base is the terminus of what is called a Subspace Tunneling Communications Array and Transporter,” Firin said. “Now you're probably thinking that the Alliance has been using subspace communications for a couple of centuries. So what's so special about this one?”

Harding shrugged.

“This technology enables us to communicate with the Federation in real time.”

Harding stared at Argov with confusion, then dawning understanding, then astonishment.

"We are about to contact the Federation to talk to them about your findings from... 2V45903, wasn't it?"

Harding nodded.

Argov directed Harding to a dais ringed with a dozen chairs and they sat close to the center. They waited quietly for a few minutes while the crew made final preparations. Then finally one of the wall sized vidscreens snapped to life and the face of a human officer filled the screen.

"This is Starbase X98VS," the officer said, "receiving you loud and clear."

"This is Argov Firin. Is Professor Mair available now?"

"Yes Sir," the duty officer said.

The image expanded to reveal a room that looked very much like the room in which Harding and Troch found themselves. They noticed that the uniforms that the crew was wearing were of an unfamiliar design. They looked vaguely like Federation uniforms but were not like any Federation uniforms they had ever seen. The image panned to the right and there on a dais similar to theirs was a bald but youngish looking man with intense eyes.

"Good to see you again, Argov" Professor Mair said with a smile.

"You too, Professor. I have with me Captain Harding of the Rim Quest. That is the Alliance research vessel that we sent to star system 2V45903 where they discovered an alien species that apparently has a very high level of mathematical knowledge. And these aliens, the Valenciara I believe they call themselves, were able to find the image of Executive Officer Decker encoded in the ripple effect that was experienced throughout all of Federation and Alliance space."

Harding looked even more astonished. He hadn't imagined that the ripple effect had been witnessed over so immense a region.

"I have just received a message from Therenin that I'd like you to see," Haywood said.

"Professor Therenin Ochohanno," Argov explained to his guest. "He's the head of Starfleet Scientific Research." Harding nodded.

An inset in the vidscreen image showed the exhausted-looking face of an elderly man with a thin fluff of white hair behind his ears. "Good day, Haywood" Therenin said with evident weariness. "Admiral Yergevneyov, my commanding officer, had already put my department on full alert after three relatively young suns in known Federation space had gone nova for no apparent reason. When your image file arrived, he immediately convened a top level meeting in one of our holosuites to review it. After we had all seen the image, there was absolute silence for what seemed like an eternity. We all realized that we had an urgent crisis on our hands. So the Admiral formed a Task Force consisting of the best mathematicians, image theorists, computer scientists, and physicists available. We have been meeting twice daily to share what little we have gleaned in the past three days about the image and the highly complex mathematics behind it.

“After much research, we have confirmed that the image is indeed that of Willard Decker of the USS Enterprise,” Therenin continued. “So we now know— or at least have strong reason to believe— that the ripple effect was caused by the Vger object, ostensibly from another dimension, whatever that means. The message is incomplete, but it certainly is very ominous— some beings, seemingly very hostile to anyone not of their kind, were apparently able to destroy Vger, the most powerful single ship or craft the Federation has ever encountered. What we don't know is what we can do about it. We don't know where Decker was, relative to the Federation, when he sent the image. We don't fully understand the mathematics behind the image processing done by the aliens that the Rim Quest encountered— what do they call themselves?”

“The Valencriara,” Argov completed.

“Ah, yes. My mind has turned to mush from lack of sleep. In any event, our best mathematicians have been working tirelessly to understand it, but they are still quite baffled, frankly, about some of its elements. We don't know the nature of the threat posed by the beings Vger encountered to the Federation or to the Alliance. We suspect— but we can't prove— that these beings whose space Decker... uh... visited... are somehow able to cause stars in our universe to collapse even though they apparently reside in some other dimension. We have studied all 1437 images embedded in the ripples. Each of them except the one involving Decker covers more than a year of time, so obviously we haven't had time to comprehend everything that these images convey. But we have learned that they record the entire journey of Vger to this strange dimension. From what little we have been able to discern it appears that the scintillating shapes of color are highly lethal, that they destroyed Vger, that they seem to be able to act independently— but that they are not alive. They appear to be a form of weapon. In all of the images we have thus far reviewed, the real intelligences of that dimension are hidden behind the mysterious clouds that seem to fill all of normal space. On arrival, Vger approached them with an explorer's friendship and curiosity. But the aliens refused all entreaties and quickly made it impossible somehow for Vger to escape. Vger was unable to use any natural materials in that dimension for power generation. So over a period of several months Vger's power source was gradually depleted. The aliens relentlessly tested Vger's defenses and when they finally collapsed for lack of energy the aliens simply overran the ship.

“We would like to learn more about the... Valencriara. I understand that Engineer Theresa Mathers was the one responsible for making first contact with these amazing creatures. Perhaps they may discern some additional piece of information in the tangle of these ripples that may tell us something about the location or the nature of these apparently hostile aliens.

“So, Professor, I am asking you to use the Hermes to get any additional information they can from the Alliance about these... these... Valencriara. Why can't I remember that name? This is urgent, Haywood. We're desperate.”

Therenin's image blinked off and Haywood turned once again toward the vidscreen.

“So there you have it, Commander,” Haywood said. “We have been

charged with obtaining every bit of information we can about the Valencriara. And I assume that to do that, we'll need to talk to Engineer Mathers. Can you tell me where she is and how we may speak with her?"

"She's under house arrest in her quarters on the Rim Quest," Harding reported. "She has an appointment with a Court Martial as soon as we return to Starbase 23."

"Court Martial!" Prof. Mair exclaimed. "Whatever for?"

"Well, Sir," Harding said with more than a hint of condescension, "she *did* violate the Prime Directive!"

"Captain!" Prof. Mair retorted. "The Valencriara have provided us the only useful information we have thus far been able to obtain about the ripple effect. Her decision to violate the Prime Directive may very well wind up saving both the Alliance and the Federation from disaster!"

"Oh, uh, well, um..."

"We'll get her on the line now, Professor," Argov said. He directed one of his staff and shortly an image of Engineer Mathers appeared on the screen with Vena Tularea visible at her side.

"This is Engineer Mathers."

Argov introduced himself and Prof. Mair.

"Can you tell us about these creatures, the Valencriara as they call themselves?" Haywood asked.

"Certainly, Sir," Theresa said. "They are the most astounding creatures I have ever witnessed. We were orbiting the Zeta planet— it's a class D gas giant. We had already scanned the planet and all of its satellites with every known device and at every known frequency and found no life. The planet's atmosphere appeared to consist chiefly of hydrogen and helium at just a few degrees above absolute zero. So I finally decided to scan it with very low frequency radio waves at the highest possible sensitivity."

"Whatever for?" Haywood asked. "No living creature has ever been found on such a planet!"

"Well, Sir," Theresa replied, "I was bored and had nothing better to do. But there at a depth of almost 10,000 kilometers I saw something I absolutely never would have suspected. I saw huge kilometer-long forms that appeared to be swimming, some of them against the current. That's when I asked Captain Harding to approve the probe."

"You asked Captain Harding for approval," Argov repeated.

"Yes, of course" Mathers replied. "I wouldn't have been able to send a probe without his approval."

Argov looked disparagingly at Harding, who visibly winced. "I see," Argov said.

"Continue," Prof. Mair urged.

"So after he gave me the go-ahead, I configured a probe to monitor them from two or three kilometers above their accustomed depth. Immediately I was able to hear that they were very musical. They were singing a song that they

sing once in every revolution of the planet about its suns. It is like a vocal symphony, or maybe an opera, and it has tremendous richness and complexity. I didn't know what they were singing about, but I knew immediately that they were profoundly intelligent. After they finished their song, I could hear some type of communication that sounded like speech— even though the Universal Translator couldn't render it as speech. But it certainly sounded like speech to me— so I wondered what it was about their language that was so different that the Universal Translator couldn't understand it. I started to look at what the parser was doing and I soon realized that it was getting stuck in a loop whenever it encountered a proper noun. I worked frantically trying to find out what was wrong— I worked on it for almost two hours without seeming to get anywhere. Then finally I realized that the problem is that their proper nouns evolve over time. Each proper noun has dozens or even hundreds of syllables, but only the first few remain constant. The rest change with each use. Since I knew that the design of the Universal Translator was based on the idea that the pronunciation of a proper noun doesn't change from one use to the next, I realized that it would always fail. But then I figured out that all I had to do was short circuit the translation of proper nouns.”

“Brilliant!” Haywood exclaimed. “That's absolutely brilliant, Mathers!”

Harding folded his arms over his chest and scowled darkly at the image of Mathers.

“Thank you, Sir. Anyway, once I was able to get the translator working, we were able to see that they are a highly intelligent race who live in a realm they call the 'Whitherstream,' a region of their world's ocean with hundred-kilometer-per-hour currents. They have absolutely no technology, and they would never need it. But they also have a very ancient civilization, one that dates back at least 250,000 Standard Years.”

“Astounding!” Argov said.

“When we experienced the ripple effect,” Theresa continued, “I listened to their conversation and found that they had very quickly discovered a great many images encoded in the ripples. I immediately asked the computer to look for any embedded message of any kind using all known encoding methods. And as you already know, the computer was unable to find anything.

“I knew they had found some images. I knew it could be very important to understanding what had caused the ripple effect. So I asked Captain Harding for permission to make First Contact.”

Argov looked again at Harding, who winced again.

“And did he give you approval to make First Contact?” Argov asked.

“Yes, Sir, he did. Again, I couldn't have done that on my own because I had to make modifications to the probe to do it. And Captain Harding approved it only because he realized how important the Valenciarara's knowledge of the encoding could be. Only because he knew, as did I, that we *had* to get that information.”

Argov cast yet another disparaging look at Harding, who grinned ridiculously and nodded.

“And how did you make First Contact?” Haywood asked.

“I configured the probe to broadcast on their wavelength,” Mathers answered, “using the reconfigured Universal Translator. Thula is their leader, and I simply introduced myself to him and asked him how he had discovered the image. He was deeply offended that we would snoop on him. Our need for devices such as our ship, the probe, the computer, the translator— it was all very puzzling to him. It was difficult for him to understand how any being could survive outside the Whitherstream. They're a very proud species with a high sense of virtue. He wouldn't tell me how to find the image unless we could convince him that we were virtuous and trustworthy. So I offered to give him read only access to our non-technical computer files so that he could evaluate our history, our culture, our music, and our philosophy.”

“You gave him access to the computer?!” Argov asked.

“Yes!” Harding exclaimed. “That's right-- she gave them access to everything!”

“Read-only access!” Theresa objected. “Sir, the Valencriara have no technology! They haven't developed a technology at any time in the last 250,000 years. They aren't about to develop one now! And when we did give them access-- with Captain Harding's approval-- they read our histories and literature, they listened to our music, they devoured our mathematics. But they never read any of our engineering or technology databases. It's just not of any interest to them!”

Argov rubbed his chin, then nodded. “Yes, that makes sense. I can see why you made the choice you made. Continue.”

“Right. It took me a while to get it set up, but once they had access, the Valencriara devoured the information in our databases with tremendous speed. They quickly tore through the mathematical files. They absorbed almost everything we have on history and philosophy, literature, and ethics. And they virtually ignored the physics, chemistry, biology, and engineering.

“When I asked Thula if he trusted us enough to tell us how to obtain the images, he was still reluctant. He had studied enough of our history to know that we have had a very violent past. So I told him about my... my father.”

Mathers paused a while to gather her composure. Argov looked uneasily around the room, as he really had no idea what relevance Theresa's father could have to the Valencriara.

“Excuse me for interrupting, Theresa,” Argov interjected with a puzzled look on his face. “But I'm afraid I haven't met your father.”

“He was killed, Sir, by the Plarestans. He was on the Regolla Convey 3 when it made First Contact.”

“I see,” Argov said with a nod. “I'm very sorry.”

“He was doing what he loved. He was working as an exobiologist. He stayed behind on the planet while the Plarestans bombarded it. He died while trying to save a child.” She wiped a tear from her cheek. “Thula is very compassionate, and he understood the significance of my father's sacrifice. He consented to give us the information. But because I'm not enough of a

mathematician, I asked him to tell it to the computer by writing it to the working storage area.”

“And when Starfleet finally received it,” Haywood said, “Prof. Ochohanno put a dozen of the finest mathematicians in Starfleet on it immediately. And we still don't fully understand the mathematics the Valencriara provided.”

“So what do we do now?” Argov asked.

“Decker was clearly trying to warn us about the aliens that were about to destroy Vger,” Prof. Mair said. “Prof. Ochohanno thinks that these aliens are responsible for the novas that have been observed throughout Federation space.”

“Novas?” Mathers asked. “What novas?”

“As of last hour,” Professor Mair said, “there have been 9 known normal main sequence stars in Federation space— all relatively young— that have become supernovas.”

Mathers gasped. “How is that possible?”

“That's exactly what we'd like to know,” Haywood said. “We've had our best people in every department working tirelessly to come up with an explanation. And we think we now have a working hypothesis. We think that somehow these aliens are able to transport neutralinos— that is, extremely heavy particles of dark matter— directly into the core of a star with virtually zero velocity. So the density of neutralinos builds up, the core of the star first contracts under its increasing gravity, and the star burns hotter. As a consequence, the star's spectrum shifts rapidly to the blue. But when the density of dark matter reaches a critical point, the nuclear fusion process is so diluted by the non-reactive dark matter that it suddenly cools down. It's just like inserting control rods into a pile of fissionable material. And because the star's mass is increasing its spectrum suddenly shifts to the red and the outward pressure of the thermonuclear heat is no longer able to overcome the gravitational pull of the core— so the core of the star implodes. The final result is that the outer part of the star is blasted out into space.”

“How do you know all this?” Mathers asked.

“We've actually been able to observe it directly twice,” Prof. Mair said. “This facility has a device known as the Subspace Tunneling Observatory, or STO. It is able to make subspace observations at galactic distances in real time.”

“Wow!” Mathers breathed.

“It uses the same technology as the Subspace Tunneling Communications Array,” Mair continued. “We have every stellar observatory at our disposal watching for stars whose spectra suddenly shift toward the blue. As soon as we find one, we scan the star's interior with the STO. We've been able to watch the population of neutralinos build up over time. Since there is no known physical process that could account for this buildup, we can only assume that this is the nature of the attack that these aliens are directing at us. So far they have targeted star systems that are uninhabited. We think they can only target objects of high mass, and that they don't have the ability to identify signs of life. But it is

only a matter of time until they target a star system that is home to billions of living beings.”

“How long does it take for them to destroy a star?” Mathers asked.

“About two to three days, depending on the size of the star,” Mair said. “But it appears that they can only do a few stars at a time.”

There was a prolonged silence during which Argov looked at Theresa, then Prof. Mair. “So what do we do now?”

“I think the first order of business” Mair offered, “is to release Engineer Mathers from confinement and give her a commendation for her work!”

“Done,” Argov said firmly. “Engineer Mathers, you are hereby released from confinement. I will see to it that all charges against you are dropped and that your pending Court Martial is canceled.”

Harding noticeably winced.

Mathers grinned. “Thank you, Sir!”

“We still need more information,” Haywood said. “Decker never finished his message. Prof. Ochohanno believes he wanted to tell us how to combat these aliens. I suspect he knew they were causing the supernovas we have observed. But we have thus far been unable to determine how they are able to transport matter into our universe, let alone how to fight back.”

“But shouldn't that be fairly easy to figure out?” Argov asked. “If it is indeed true that the aliens that Decker encountered are also responsible for the supernovas, then shouldn't we be able to deduce their location by using Decker's signal to triangulate his location? Then it should just be a matter of doing the inverse of whatever the aliens are doing to affect matter in their universe.”

Haywood smiled. “Yes, it would seem to be a fairly straightforward deduction, wouldn't it? And that was in fact our first thought as well. But the problem is that Starfleet's finest have been unable to deduce a location for Decker from his message. It might seem that we should be able to infer his location from the power of the signal. But it appears to our best analysts that there are a great many possibilities, and we don't really have any way of ruling out enough of them to ensure that we could search them all even in a thousand lifetimes. Perhaps there's some additional information embedded in the signal that we have been unable to find. Or perhaps there is something about the signal itself that tells us from whence it was sent. Frankly, we just don't know.”

“Sir,” Mathers replied, “may I suggest that perhaps the Valencriara can help us again?”

“That is exactly the course of action Prof. Ochohanno wants me to pursue,” Haywood replied. “What would you suggest?”

“Well, Sir, they have a tremendous command of mathematics. They may be able to deduce the location of these aliens and their method of attack.”

Argov nodded. “I concur.”

Haywood shrugged. “It's worth a shot. We can use all the help we can get.”

“But the only way that this could work,” Mathers continued, “is if you state

it as a problem in pure mathematics. The Valencriara have no understanding of physics. When we made First Contact, the majority of them believed that their planet's ocean— the Whitherstream, as they call it— contains everything that exists. They don't know what a star is, they don't understand gravity or density or chemistry or subspace. You really can't describe such concepts to them in anything but purely mathematical terms.”

“I see,” Argov said.

Prov. Mair nodded. “I think we can phrase the problem in a form that the Valencriara will understand. I'll contact Prof. Ochohanno immediately!” He rose from his chair and his image blinked off.

“Very well,” Argov said, slapping his hands on his thighs and rising. “Then in the meantime, Engineer Mathers, you may enjoy the hospitality of this station. I will arrange for my Chief Engineer to give you a tour of our facilities.”

Mathers smiled. “Thank you Sir, but I really believe that I should stay close to the Rim Quest. I feel that we should leave just as soon as Prof. Mair is ready. And I want to make sure that the ship is ready for immediate departure.”

“Yes, absolutely, you are right,” Argov agreed.

“I think I'd better get back to the Rim Quest too,” Harding said as he offered Argov his hand.

Argov took Harding's hand, but held it firmly with both of his own. “I would like you to remain a guest of our station. There is much about Engineer Mathers's testimony that I would like to discuss with you further.”

“But...” Harding sputtered, “but the Rim Quest will need a commanding officer!”

“And I have just the person in mind!” Argov said. He waved to one of the attendant security officers who strode quickly and took Harding by the arm. “In the meantime, I insist that you make yourself comfortable in our guest quarters.”

And with that the security officer escorted a bewildered Captain Harding to the exit.

Chapter 19: Opportunity

Captain Lucien Voranalla graduated third in his class of 127 at the Alliance Academy. His first assignment out of the Academy was to serve as pilot for a transport vessel.

“What did I do to disappoint you so much?” he demanded of his commanding officer. “All I get is a transport vessel? Boring! Why?”

His commander just smiled.

For his first mission he was to take a group of engineers to a base known to him only as AB493S. He was given the coordinates of the base— coordinates that the Master Registry mapped to a pulsar but not to a base. When he was within scanning distance he thought there must be something wrong with his long range scanner— the base was too large by at least a factor of 10! And it was far too close to the pulsar. As he got close enough for a visual image, he couldn't believe what he saw. It was the most astounding thing he had ever seen! The approach was nothing less than breathtaking. The base was enormous! And such power! The tractor field that the base used to draw the transport vessel into the docking bay extended at least 1000 times farther than any beam he knew possible. When you're aboard a ship or a starbase, you sense the power throbbing through the bulkheads, the floors, the walls, even the air. It's something you feel throughout your body. If you are aboard a vessel for any length of time you come to know its sounds and throbs, you know when the ship is running well, and you know when something is wrong. The first time he stepped from his little transport vessel onto the deck of the loading bay he felt nothing whatsoever. It was astonishing! What power it must have to mask the base's natural throb!

He was greeted by the engineer who brought him in on the tractor beam.

“Welcome to station AB493S,” he said as he extended his hand. “I'm Scot Stimpson.”

“Why isn't this base in the Master Registry?”

“Because it's the most secret base in the Alliance.”

“Really? What does it do?”

Scot shook his head. “I can't tell you that. In fact I don't even know.”

After his first mission his commander called him.

“So now that you've been on the most boring mission of all time, do you want to be reassigned?”

Lucien shook his head. “No Sir! And I was so very wrong to criticize your decision. Thank you, Sir, thank you!”

In the four years that he had been transporting personnel to and from AB493S, he had never learned its purpose. No one had even told him that it was also called the Alliance Ariel base. He had asked many of those whom he had transported, but invariably each had answered that he shouldn't ask. He was only allowed on the base long enough for his vessel to be serviced, and he was told that the only place other than the docking bay that he could visit was the

restaurant just across the Grand Promenade. So every time he traveled to AB493S, he went to the same restaurant and ate a kingly meal prepared with the freshest ingredients.

For the last four years he had been ordering his meals from a waitress by the name of Julia. And while she was as circumspect as the many personnel he had transported, he had nonetheless been able to extract small tidbits of information from her. From her he had learned about the farms and forests, the fields and animals. But still the purpose of AB493S remained a complete mystery.

That day Lucien savored a delectable omelet made with... eggs! Not replicated or synthesized chemical mixtures, but actual eggs from a real chicken! And cheese made from real milk! It was absolutely the most delicious breakfast one could have at any Alliance base. Most of the southern latitudes of the station, he learned, were devoted to agriculture. There were acres of fields with crops of wheat, corn, soy, and herbs. And herds of cattle, chickens, pigs, and sheep that grazed immense rolling fields of grass, hay, oats, and clover. There was even a river with a rocky bed that circumnavigated Latitude South 15, in which were raised the tastiest trout and salmon found anywhere.

Lucien lifted a forkful of his cheese and mushroom omelet and placed it delicately on his tongue.

“Mmmm,” he hummed.

“Captain Voranalla?” a tall security officer asked him.

Lucien hurriedly swallowed. “Yes?”

“You are to follow me to the Command Center immediately.”

“Certainly,” Lucien said with what he hoped resembled enthusiasm. He looked down forlornly at his plate. No more time for savoring. He pushed his plate aside and rose to follow the security officer to the nearest turbolift.

When they finally arrived at the Command Center, Argov emerged and extended his hand.

“I’m Argov Firin, Base Commander,” he said. “I would like you to take command of a research vessel known as the Rim Quest. It is to return to the Zeta planet of a nearby planetary system on a mission of the utmost importance to the Alliance. I have asked you here to brief you on the mission and to ask if I can count on you to serve the interests of the Alliance.”

Lucien stiffened and saluted. “Absolutely, Sir.” A research vessel! How fortunate! It was more than he could have hoped for. But what sort of mission, he wondered?

Argov described the mission and the 2V45903 planetary system, the Valencriara, the recent supernovas, and the need to get useful mathematical deductions from the Valencriara. Lucien listened with ever more amazement. “But most importantly, Captain,” Argov whispered, “it is essential that we keep the fruits of this mission from the Plarestans. They have been patrolling shipping lanes throughout this region. We now have a treaty with them, but 2V45903 is in neutral territory. That’s why I specifically sought you to captain the Rim Quest. You have piloted transports to and from this station for the last four years, and

you have often had to contend with Plarestan patrols. You have the experience necessary to see the mission through.”

“I won't disappoint you, Sir,” he said with a bow.

“I've been reviewing the mission logs of the four crew members,” Argov continued. “There was considerable animosity between Captain Harding and Engineer Mathers. Now Mathers is essential to the success of the mission. She knows how to communicate with the Valencriara, and she knows how to obtain the information we need. There probably won't be much time before you depart, but I want you to spend it working with Mathers and getting familiar with her. If you sense anything that might cause friction between you, or that might in any way compromise the mission, I want to know about it immediately. Understood?”

“Yes Sir!”

“One more thing. A Klingon by the name of Troch was the Rim Quest's security officer. I have reviewed the personnel logs of the Rim Quest and have found that Mathers didn't get along with Troch. It may have something to do with the fact that he is Klingon. Her grandfather was killed by Klingons. So I have decided to replace Troch for the duration of this mission with someone from the base. Officer Calvin Wrentz has had three years of service on the base as one of our most valued security analysts. He planned and implemented many of the security measures we use here at the base. I trust him implicitly. And he's very congenial— I don't know of anyone who dislikes him.”

“Very good Sir!”

“My Duty Officer has been instructed to see that you are escorted to the Rim Quest and that you are introduced to the other crew members. So get going!”

Captain Voranalla saluted again, then turned on his heel and headed back to the turbolift tube. Commander Firin had certainly made the right choice, he thought. The Plarestans are cagey. Four years he had been running transports along the borders of Plarestan space. Four years he had learned how to evade their patrols. And he knew— better than most— the cost of failing to be vigilant. One of his classmates, Captain Sharma Almantha, was running a cargo barge along a major trade route— one that had been used by civilizations in this region over many centuries. But the Plarestans assaulted any and all vessels that traveled the shipping lane.

“We're unarmed,” Captain Almantha had told him. “We're carrying medical supplies and food-- no weapons, no troops. They won't attack us— there's no reason.”

But a Plarestan patrol ship disabled his vessel with a few well-targeted phaser blasts, boarded it, took the entire crew prisoner, and towed it to a base deep in Plarestan space. Three years Captain Almantha and his crew spent on a Plarestan prison planet. He had heard that with the signing of the new treaty he and his crew were to be released. They were lucky they weren't killed.

#

On board the Rim Quest, Mathers had just run an engine diagnostic and was now checking the results. The warp drive was out of characteristic by

almost half a percent. "Doesn't anyone on this base know how to tune a warp drive?" she mumbled.

"Insufficient information," the computer informed her.

"Oh, shut up you stupid computer!"

"Unable to comply."

"Gaaaaa! Vena!" she called into the com. "Vena, are you there?"

"Yes, Theresa," came Vena's languid, sultry contralto.

"I don't think that base engineer would know the difference between a warp drive and a replicator," Theresa said with evident irritation. "We need to get someone in here who really understands warp drives."

"I will call the docking bay Duty Officer and request a different engineer," she said.

"Don't bother," Theresa said. "Let's just call the base commander directly. What's his name again?"

"Argov Firin," Vena replied.

"Right, let's call him and..."

"Just a minute," Vena broke in. "There's someone here who is asking permission to board."

Mathers went forward to the bridge. Vena introduced Security Officer Wrentz who in turn introduced Captain Lucien Voranalla.

"Welcome aboard Sir," Mathers said with a slight bow.

"My understanding is that we should expect a call from Alliance Command any time in the next few hours with their mathematical formulation of the question we are to ask the Valencriara," Voranalla said. "When we get that call we need to be ready to leave immediately. So I want to know the condition of the engines and whether there is anything we can do now to ensure that we are able to complete the mission."

"The docking bay engineer ran some tests and made a few adjustments to the warp drive," Mathers said. "But when I ran a diagnostic it showed that the warp drive was almost half a percent out of characteristic."

"I don't like to run a ship when the warp drive is more than a tenth of percent out of characteristic," Lucien said. "The risk of a warp field collapse is too great. I'll contact the base commander and we'll get a different warp engineer to look at the engine. OK?"

"Yes Sir!" Mathers beamed. She already liked this new captain. Voranalla then asked Mathers to show him the vessel, and they walked the entire ship from bridge to stern.

"She's a fine ship," he said when they had finished. "She's compact and efficient, easy to handle, well suited to research. She's a bit small, and there's not much in the way of amenities. But it'll be a privilege to serve on her."

A new engineering team arrived and asked for permission to board.

"Permission granted," Captain Voranalla said, "but you've only got about an hour to make up for the mistakes of the previous team."

“Yes Sir,” the lead engineer said. “We’ll get the job done.”

“You’d better, or you’ll be tuning garbage scows in the most remote sector of Alliance space.”

The engineer grimaced and headed toward Engineering.

Chapter 20: Disaster

Troch surveyed the banks of vidscreens that monitored every sensitive area on the base. Thompson had brought him to the Security Command Center to show him how the security system was designed.

“From this room we can set the level of monitoring in any area,” Thompson explained. “We can tune the sensors to signal us for the presence of any specific compound, type of weapon, or species. We have full control over access to all corridors, we can release several different nerve agents throughout the base, and in an emergency all base operations can be controlled through this facility.”

Troch grunted and nodded. “I have had full training on base operations at the Alliance Academy. I am very familiar with these systems.” And once again casually and surreptitiously, he twisted the ring on his index finger.

#

“Captain Voranalla!” came the voice of Argov Firin.

“Yes Sir,” Lucien replied.

“Assemble your crew on your ship's bridge! We are to receive a call from Starfleet in five minutes!”

“Yes Sir!” Lucien barked orders into the com, calling Mathers, Tularea, and Wrentz to the bridge. When Argov contacted them again, they all watched on a vidscreen as the image of Prof. Haywood Mair appeared alongside that of Commander Firin.

“Greetings, Argov!” Haywood said. “I think we have what you need. The specialists at Starfleet have tried to condense everything that we know about the ripple effect and the novas into a purely mathematical problem. They say they can't be sure that they've succeeded since if they had, they should be able to solve the problem themselves. But they think that what they have is enough for the Valencriara to locate these aliens and to tell us how to fight back. So we're counting on you to do everything you can to get the Valencriara to solve the mathematics of this problem and provide you with the answer.”

“We have a fine crew,” Argov said, “the ship has been stocked with all necessary equipment and supplies, and the engines have been tuned and inspected. They can depart as soon as we have loaded your mathematical files.”

“Excellent!” Haywood said.

“Allow me to introduce Captain Voranalla,” Argov said.

Lucien nodded. “I am honored to serve on such an important mission, Sir.”

When he had transferred the files to the ship's computer, Argov signaled the Docking Bay Duty Officer and the Rim Quest was released. The shield of the cavernous bay snapped open and they could see from the ship's monitors that the base's shields had been extended far out into space. Captain Voranalla thanked the Duty Officer and eased the Rim Quest away from the docking bay.

He gazed out beyond the base toward the blackness of space, out toward

star system 2V45903, just two days away at maximum warp. He thought about the Valencriara singing in the protective comfort of their Whitherstream on a planet of frigid swirling gas... Then he saw something-- something impossible, something very wrong... Instinctively he raised the shields.

"All hands!" he shouted into the com. "Take your stations! We're under attack!"

#

A phaser blast in the communications room! The security officer was struck; he fell to the floor with a hole the size of a grapefruit in the back of his head. Argov threw himself on the floor and looked from under the chairs and tables toward the doorway-- someone entered holding a phaser in his extended hand. It was Troch! There was a silver shimmering blur, Troch was thrown backwards against the wall with such force that his skull cracked; he fell limply to the floor. There were shouts and a number of phaser blasts-- blasts with an unfamiliar greenish color. Then silence. Argov rose, then rushed over to the security officer and took his phaser, then set it to kill. He looked to the doorway and saw a number of lifeless forms clumped close together-- Romulans!! He examined Troch-- he was dead, but his skull was oozing greenish blood, not the purple blood of a Klingon. Troch was a Romulan! Argov signaled to the others in the room to follow him.

Argov slipped into the corridor and counted seven Romulans-- all lifeless. He took their weapons and handed them to the crew members following him. He rounded the corner and could see that the security door to the engineering department had been blasted open by something vastly more powerful than a hand phaser. He walked toward it with his back to the wall and his phaser arm outstretched. There was another Romulan body by the entrance. Argov slid up next to the gaping hole in the wall to engineering and listened... Nothing. He looked inside and saw... a great deal of smoke, and more bodies-- both Romulan and Alliance. He stepped into the room and there was Caralasham Orpilava, collapsed on the floor beside the engineering console, breathing hard and looking worn. There was blood-- blue Uralaschian blood-- trickling from her forehead, and there were smatterings of greenish blood all over her chest and limbs.

"Caralasham!" Argov exclaimed. "Are you all right?"

"Yes Sir," came the girlish sounding translation. "What manner of beings are these invaders?"

"Romulans," Argov answered. "We thought there were no Romulans anywhere in this region. Obviously we were wrong. I've known of them only through my history classes at the Alliance Academy. They were once enemies of the Federation."

"What do you suppose they want?"

"Control of this base, obviously. And they very nearly got it."

"Sir!" exclaimed officer Joyce Laverne. "The Security Command Center has been taken!" She pointed to a vidscreen.

Argov turned with alarm, then rose and looked. The vidscreen showed the

Command Center littered with Alliance dead, and a number of Romulans taking positions at the command stations.

“Computer, lock out all command functions from the Security Command Center and transfer them to Main Engineering,” Argov said. “Authorization Firin, omega pi 2 7 Dorain.”

“Unable to comply,” the computer responded flatly.

“What?” Argov exclaimed with alarm. “Computer, why?”

“Command functions for the Security Command Center have been locked,” the computer droned.

“Locked? Locked by whom?” Argov asked.

“By security officer Thompson,” the computer replied.

“Thompson? Thompson? Don't tell me he's a Romulan too...”

“Sir!” officer Laverne said, pointing again to the vidscreen. Argov looked and saw that she had focused it on the contorted figure of Security Officer Thompson, strapped to a tabletop, lifeless— there was a greenish tinge to his forehead, and his face was twisted in a grotesque grimace. He had obviously undergone excruciating torment in his last moments.

“Well,” Argov growled, “I knew that the Romulans had a sophisticated mind probing technology. But it appears that they may have made many advancements in the past 120 years.”

Laverne and the others grimaced and nodded.

“Computer, enable auto-destruct countdown, time one minute, authorization Firin, omega pi 2 7 Dorain.”

“Unable to comply.”

“Computer, why?”

“Base Commander Firin has been compromised. All commands by Commander Firin are to be ignored.”

They could all see what had happened. It is a special provision of security policies that allows the ranking Duty Officer of the Security Command Center to lock out all other command functions from anyone outside the Command Center itself— including the base commander. It is intended to address a rare circumstance in which the base commander has been compromised and cannot be trusted. It is an obscure provision, but one that would be known to someone trained as an Alliance Security Officer. Someone like Troch.

“Turn off those cameras!” Argov said as he pointed to the vidcams above. “Then I want you to raise a force field in all corridors and Jefferies tubes that would give them access to Main Engineering. And shut down all ventilators in Main Engineering.”

Officer Laverne nodded and she and officer Garrick Mathews set to work.

“Next I want a full assessment of our situation— how many crew we have, how many weapons. How much food and water. Medical supplies. What do we control, and what is in their control.”

“The force fields are up,” Laverne reported, “and the ventilators have been

shut down.”

“We have control of Main Engineering,” Mathews said, “the Communications Array, and the Transportation System. They have control of base security and environmental control.”

“Sir, we have about 4 days worth of breathable air,” Laverne said solemnly.

“One more thing, Sir,” Mathews said. “In this scenario the Base Commander is presumed to be compromised in some way. So the crew will be unwilling to follow any of your commands.”

Argov nodded. “Can we shut down power to the Security Command Center?”

“No sir,” Laverne replied. “That’s one of the security precautions built into the Base Commander Compromised scenario.”

“Can they cut off our power?”

“Yes, but doing so would bring down the base’s shields and that would destroy the base,” Mathews answered.

“Right,” Argov nodded. “One more thing. Security Officer Orpilava and I set up an autodestruct alarm. Can they disable it?”

Laverne nodded. “Yes, Sir. Any commands you may have entered before they took over can be recinded.”

“Then contact Alliance Command and the Federation and inform them of our situation. So we know how they got control of the SCC— but how did they get onto the base?”

“Perhaps they entered when we opened the docking bay...” Laverne began.

“...for the Rim Quest!” Argov exclaimed.

#

Captain Voranalla was stunned when he saw a ship decloaking just a few kilometers from the outer edge of the base’s shields. A Romulan warbird! “Can’t be!” he thought for a moment— but there it was. Quickly, instinctively, he threw up the ship’s shields— but he knew the unarmed Rim Quest was no match for a ship like that.

“Warn the base!” Lucien barked at Vena. The warbird would certainly try to gain entry to the base while the shields were open for the Rim Quest. And the Romulans would probably blast anything in their way. Lucien felt he had only one choice— he punched the engine to full impulse power. The ship zipped out of the docking bay— just as a phaser blast from the warbird slammed into the docking bay. Lucien quickly plotted a zigzag course out of the solar system. Wham! The entire ship shuddered as a phaser blast from the warbird slammed into the power nacelles. Lucien’s hands flew over the controls as he prepared the Rim Quest to go to warp. Wham! Another phaser blast. He could see that the shields were down to 27 percent— one more blast and they’d be finished. He touched the control— and the Rim Quest immediately jumped to warp 2, and just as immediately dropped out of warp and came to an abrupt stop. Vena and

Mathers looked at the Captain with puzzled expressions.

“Vena,” Lucien asked, “see if you can raise Commander Firin on the com.”

Mathers face brightened. “I see! You jumped to warp just long enough to take us out of range of the warbird!”

Once again Lucien's hands flew over the controls as he plotted a new course for 2V45903.

“Sir,” Vena reported, “I have been unable to raise the Commander.”

“Keep trying,” Lucien said. “We'll wait here a few minutes to see if we can reach him. Wait a minute... What are those?” Lucien pointed at some dots that suddenly appeared on the tactical view just a few kilometers from the base. Vena zoomed the view in and they could see that the dots were in fact more Romulan warbirds— five in all. And the base shields were still open.

“They must have succeeded in gaining control of the docking bay,” Mathers said.

Lucien nodded. “They probably took out the entire docking bay Command Center with that first phaser blast.”

“But the Security Command Center has the power to close the docking shields at any time,” Wrentz said, “regardless of whether or not the docking bay duty officer has closed them.”

“Then... does that mean they've gained control of the base?” Captain Voranalla asked.

“They must somehow have gained control of the Security Command Center,” Wrentz replied. “That's the only way they could have kept the docking bay shields open.”

“But... how?” the Captain wondered.

“Sir!” Vena interjected. “It's Commander Firin, Sir! He called us on an unusual frequency.” She touched the broadcast icon.

“Captain?” came Argov's voice.

“Commander Firin!” Lucien replied. “I'm glad you're OK.”

“What is your situation?” Argov asked.

“We are about 2 billion kilometers from the base. There are six Romulan warbirds positioned around the base.”

“They have gained control of the Security Command Center,” Argov said.

“But how?” Wrentz asked.

“Officer Troch,” Argov replied, “Security Officer of the Rim Quest. He was a Romulan.”

“A Romulan!” Mathers exclaimed.

“I granted his request to accompany my security officer,” Argov continued. “We believe that he took control of the of the SCC just at the moment that the Rim Quest was exiting the base. The Romulans probably transported directly to the SCC from their ship while the docking shields were still open.”

“We saw the warbird decloak just as we were exiting the docking bay,” Voranalla said. “They blasted the docking bay, then they took 2 shots at us. We

escaped by jumping to warp for 2 seconds.”

“They now have control of all security and environmental control functions,” Argov said. “We have control of Main Engineering and of the Subspace Communications Station. But we shut off all ventilation in Main Engineering in case they try to flood it with a neural agent or worse.”

“So you don't have much time, do you?” Lucien replied.

“No,” Argov said. “We've only got about four days of air. Now that we have a better idea of their strength, we'll send a message to the Alliance-- but with six enemy vessels orbiting the station, it will probably take them more than four days to mount a credible assault.”

“What can we do to help?” Voranalla asked.

“Go to the Valencriara's planet and get the information we need!” Argov said. “Send it us on this frequency-- we'll be listening. We need that information at any cost, Captain! And we need it in less than 4 days!!”

“Very good Sir-- we won't disappoint you!” Voranalla replied. He nodded to Vena and she dropped the line. “Let's get out of here!” he said. He touched the command icon and the Rim Quest departed at warp 8.

Chapter 21: Gas

Officer Byron Smythe was enjoying his daily ritual— a cup of black breakfast tea with a bit of cream and a croissant— at a small restaurant on the Grand Promenade. His table was just inside the broad archway that opened onto the Promenade. Several others were arranged just outside the archway on the fringe of the Promenade. The filtered air of the base filled his nostrils with the scent of sanitized citrus. His shift was to start in another fifteen minutes, but for the moment he could enjoy the reflective calm of his tea.

Nothing of his Alliance Academy training in engineering had prepared him for what he experienced on the Alliance Ariel! He had graduated second in his class with a major in warp drive technology. But there were so many systems on the base that employed a technology far in advance of anything he had seen at the Academy— the shields, the stabilizers, even the base security system. He wondered if these systems really could have been designed by Alliance personnel— the shield technology alone was so complex that it must have taken decades to develop. Ever since he had arrived on the base three years earlier he had spent every spare moment learning whatever he could about these systems – and there was still so much he didn't understand! Most of the shield technology was based on a physical model that he simply didn't grasp. But then there was nothing in his training at the Academy that had prepared him for the idea of harnessing the power of a pulsar.

Such a privilege it was! There were many talented engineers who could only dream of working with such technology! And yet, the real purpose of the base eluded him. His clearance was Level 7. He had applied for Level 8 two months earlier in hopes that at last he would learn the base's real purpose. He was told his application would take four months to process. In the meantime he had been assigned duty on all of the base's secondary systems— this week it was docking bays. He had been in the Command Center of the Rim Quest's docking bay when it had arrived.

He knew the base was designed to channel the pulsar's immense electromagnetic field into the base's power generator, and that the base operated a power system of more than a thousand times that of the entire planet of Goridon. To what end? The base's defenses were very powerful, but not extraordinary. He knew that the stabilizers were designed to prevent the base from wobbling by more than a nanometer over any five second period— a fantastic achievement by any measure! But why? What engineering purpose could possibly be served by such tremendously accurate stabilizers? He tried to imagine something— anything— that might require such accuracy. But...

Suddenly there was a blast that blew a section of wall across the Promenade and knocked him off his seat. A ferocious blast of air dragged him across the floor toward the breach. Across the Promenade there was now a gaping hole where the docking bay once serviced the Rim Quest. With all his might he struggled hold onto the table and pull himself back towards the wall. A chair tumbled across the floor and crashed into his ribcage. Pain shot through

the left side of his body; he winced and continued pulling himself closer to the wall. He looked back over his right shoulder and saw one of the restaurant's waiters lose his struggle to reach the wall. With a wild, terrified look he screamed unheard in the deafening roar and slid out toward the breach, frantically raking the glass-smooth flooring with his fingernails.

And then the ferocious wind stopped. Byron reached the nearest wall and pulled himself to his feet. He looked out the archway and saw that the base's security system had erected a force field that sealed off the gaping wound across the Promenade. Through the shattered wall Byron could just see the interior of the docking bay. The Rim Quest was gone-- and there, inside the bay, was something he had only seen in videos from the time of the Dominion war. A green ship of singular design. A Romulan warbird.

Why hadn't someone erected a force field around the exterior of the docking bay, he wondered? Wouldn't someone in the Security Command Center be aware that a Romulan warbird was in the docking bay? Surely they would want to prevent the base from being taken over by Romulans!

His waitress was grasping the wall near the kitchen, just a few meters away, and gazing out through the archway toward the breach with a dumbfounded expression. He waved her back from the archway wall and crept back inside by a meter or two. Then Byron brought down the restaurant's archway security door and looked madly about for a base command panel.

"Ah! There, by the kitchen door!"

"Did... did... did you seeee that!" the waitress spluttered, pointing with a trembling arm toward the archway. "Michael! He... he..." She hung her head and sobbed.

"Yes, I saw it," Byron said, putting his hand on her shoulder. "My name is Byron Smythe. He's gone, and so are many others. But now we need to do what we can to help anyone else who is in danger! Will you help me?"

She choked back her tears and raised her eyes to look into Byron's. There was fear and turmoil in her eyes, but she put out her hand and gripped Byron's. "Yes," she croaked. "Yes, I will help."

"What's your name?"

"Susan. My name is Susan Palmer."

"OK, Susan. First I want to check on the base status." He logged into the command panel and requested a view of the docking bay.

"Hmmm, that's odd..."

"What?" Susan said with barely concealed hysteria. "What's odd?"

"I was trying to check on the docking bay to see what happened, but the computer just denied me access. Why? With my clearance, I should certainly have access-- especially in a crisis like this!"

Was the warbird responsible for the blast, he wondered? He wanted to view the region surrounding the base-- but he quickly found that all access to the external monitors was restricted. Why? His clearance was certainly high enough for that too. Unless...

He checked the Security Command Center's status page. There in bold red letters it said:

BASE COMMANDER COMPROMISED.

Do not accept any orders from Base Commander Argov Firin or from anyone directed by him.

Do not attempt to communicate with anyone off base.

Report any irregularities to the Security Command Center.

THIS IS A BASE LEVEL 6 EMERGENCY!

"What does *that* mean?" Susan asked with rising panic.

"It's worse than I feared. According to this, the base commander has been compromised."

"Compromised!" Susan said. "How? Why?"

"It probably means he's been either killed or captured," Byron said.

"Killed? So we're under attack!"

"Yes, we most definitely are."

How had this happened, he wondered? There was an Alliance ship in that docking bay-- the... the... Rim Quest! Perhaps when the docking shields were opened to allow the Rim Quest to depart the warbird appeared within range of the base. It must have been cloaked, he guessed. That would explain why no one thought they were under attack. Perhaps the Romulans had time and opportunity to beam into the Base Commander's offices and abduct him. But they would need coordinates-- the base is too huge to scan quickly for someone whose signature you don't already know. There must have been a spy-- someone who had access to the Base Commander, someone who knew the security features and policies of the base. Someone who was perhaps close enough to Commander Firin to obtain his coordinates at the precise moment when he knew the aliens would strike. And that would likely mean that no one could be trusted. No one.

Why again had the Security Command Center not issued an alert about the attack? Perhaps they were too preoccupied with the abduction of Commander Firin. Or perhaps the Romulans had managed to commandeer the Security Command Center itself.

"OK," Byron said. "Here's what I want you to do. Call in to the Security Command Center and report what you have seen. Then tell them that you saw the docking bay wall get blown to pieces and you wonder what could have done that. But whatever you do, don't mention either me or my name. Do you understand?"

"Yes Sir," she said, still shaking visibly. She straightened himself up, then touched her com badge. "Security Command, this is Susan Palmer."

There was a brief pause, then a calm assured voice said "This is Security Command. Go ahead, Palmer."

“There was a huge blast! It tore out a wall across the Promenade— I think it's part of the docking bay! Some people were sucked out into space before the shield came up! We need help! There are injured people here! We need medics-- around the... the... where the blast was. What could blow such a huge hole like that? Lots of people died down here!” She started to sob again.

“Now calm down Palmer,” the voice said warmly. “Where are you?”

“Grand Promenade, Longitude 70.”

“No, no,” the voice said with what she took for indignation. “I mean are you someplace safe?”

“Yes, yes, I'm... I'm in the restaurant with the archway door closed.”

“Well, then,” the voice said soothingly, “there's really nothing more for you to worry about, is there?”

“What about the others!” Susan shouted. “What about the other people on the Promenade? Lots of them need help! Some are injured! What about them?”

Then a long pause. “We're working on it now, Ma'am,” the voice said reassuringly. “We'll soon have someone down there. Security Command out.”

Byron scowled at the monitor. Then they heard an ominous hissing sound from overhead.

He ripped the com badge from his uniform, then grabbed Susan's and threw them both on the floor. “Deep breath!” he yelled. “Hold it-- and RUN!” He grabbed Susan's hand and the two of them ran toward the rear of the restaurant to the delivery door. He pushed the door open and led Susan down the corridor. A fine yellowish mist was descending from the high ceiling— Byron estimated that they had just seconds before... There! A service tube just meters away! He rushed over and punched his service access code— the hatch door slid open and he ushered Susan in, then followed quickly behind and closed the door.

The two of them gasped, then breathed deeply. The air was good.

“WHAT IS GOING ON?” Susan yelled. “My friends! People are dying! What is happening?” She beat her clenched fists against his chest.

“I think that the base has been taken over by Romulans,” Byron said, putting his hands on her shoulders. “I think they have control of the Security Command Center. That means that they have full control of base defenses and all aspects of environmental control.”

Susan winced. “Romulans! I thought there weren't any Romulans in this region of the galaxy!”

“Yeah, that's what everybody thought. But apparently everybody was wrong.”

“What was that... that gas?”

“Anasticene,” Byron said.

“Is it... Is it...”

“Poisonous?” Byron finished. “Yes, very. I think the aliens are planning to board the station. They probably released the gas to silence anyone who might have seen what they are doing.”

"How long before the gas dissipates?" she asked.

"About 30 minutes."

Susan looked up and saw that the tube's ladder went up for another five levels.

"We need to get up to the next level," Byron said. "We've got to get to a command terminal to see what they are planning next."

"I owe you my life," she whispered. "Michael... and the others... they..." Tears began to stream down her cheeks.

Byron patted her lightly on the shoulder. "I... I wish there was something we could have done for them. But now we have to think about our own survival—and the survival of this base. We have to fight these aliens with every ounce of strength we have!"

Susan searched his eyes, then wiped the tears from her cheeks with the palms of her hands. "OK," she said, and she began the climb.

They went up 83 rungs— she counted every one— and reached the door at the next level. They looked out through the door's small window and saw that there was still a dense yellow mist in the corridor.

"What do we do now?" Susan asked.

"We wait," Byron said. "If we go out there now, we'll die within 30 seconds. The normal gas dispersal cycle injects the the gas quickly, then halts all air recirculation for 30 minutes, after which time the gas is purged and normal air recirculation begins again."

"So did they gas the entire station?"

Byron shook his head. "I don't know. I suspect they wouldn't have released the gas if they had complete control of the station. So I think that must mean that they don't have control of some critical section of the base."

"But if they control the Security Center or whatever, doesn't that mean that they have full control of the base?"

"There is one section that cannot be controlled from the Security Command Center. That is main engineering."

"And that's where the Commander is?"

"Maybe," Byron said.

"Why isn't there any gas in this tube?"

"It's a safety feature," Byron said. "The gas is only to be used when the base has been invaded by an alien force. If our own personnel are trapped where the gas has been released, those who have access codes can escape through these tubes."

"Won't they be looking for us? Can't they track us with sensors?"

"Yes, they can track us— but only if they think they need to look for us," Byron explained. "The base's monitoring systems are designed to rely on our com badges to determine our position. Our com badges aren't moving, so they'll think we were killed by the gas. Unless they decide to use the motion sensors, they won't be aware of our movements."

“So what can we do? They have control of the base. Won't they have force fields wherever they are to protect them?”

“Probably, yes,” Byron said. “But there's something else they may not know about our systems. When a force field is established, the base normally only raises the field in a corridor, not in any adjacent rooms. If they weren't careful, they may have left an adjoining wall unprotected. And that's where we'll get them.”

“So we'll need some weapons, won't we? You're not carrying a phaser.”

“No, I'm an engineer, and I don't usually carry a phaser. And they will probably have locked down all of the base armories. No, we'll need to use something else.”

Suddenly they heard a loud WHOOSH outside. Together they looked out the little window.

“Ah,” Byron said. “The purge cycle has begun. In a few minutes we'll be able to get out of here.”

They watched in silence as the yellow cloud dissipated, then finally they heard a WHIRRR that announced the return of the normal air cycle. Cautiously Byron opened the door and sniffed. “Seems OK,” he said, and they stepped into the corridor. It was broad and high, like that of the floor below— but they immediately noticed a number of contorted bodies littered throughout its length.

“Oooh, so many!” Susan wailed.

“It's an excruciating death. This way.” He led them toward a room about 50 meters down the corridor. He entered his security code and they went inside.

“Stop where you are!” a voice said. They looked to their right and saw a security officer with a phaser aimed directly at them. To his right were two other security officers with weapons drawn. “Who are you?” the voice said.

“Byron Smythe, Senior Engineer, and this is Susan Palmer, a waitress. We ran for one of the service tubes as soon as we heard the gas. Who are you?”

“I'm Jason Ward, this is Oliver Kline, and in the corner is Meryl Reins.”

“Do you know how many levels they gassed?” Byron asked.

“At least three,” Kline replied. “This one and the two below.”

“And are they docking their ships now?” Byron asked.

“Can't tell,” Ward replied. “We don't have access to view any of the docking bays.”

“It seems that they have cut off all access to view any of the levels they gassed,” Reins said.

“May I?” Byron said, waving his hand at the command panel.

“Sure,” Kline said, stepping aside.

Byron walked up to the command panel and touched a small icon in the lower left corner. A numeric keypad appeared, and he punched in his security code. The panel displayed a schematic of the base in which only a few sections were blacked out. He touched Longitude 0 and the view zoomed in to display the Grand Promenade. He switched to a live view. They saw dozens of bodies,

many of them clumped around the turbolift doors.

"They must've shut off the turbolifts first," Ward said. The others nodded.

They saw a few aliens strolling casually along the walk. Byron focused on one of the aliens— and the others in the room gasped.

"Vulcans!" Reins said. The others nodded.

"I don't think so," Byron said. "I saw their ship in the docking bay. It isn't like any Vulcan ship I've ever seen." The others looked quizzically at the panel. "I think they are Romulans."

"Romulans!" Ward exclaimed. "But I didn't think there were any Romulans in this region!"

"Neither did anyone else," Byron said.

"What do they want?" Susan asked.

"This is a secret base," Byron said. "It's so secret that most people on the base don't know what its purpose is. I think the Romulans must believe that this base hosts an extremely powerful weapon. I think they're here to obtain the base's secret technology."

"And is it a secret weapon?" Reins asked. "Is that why this base was built?"

"I don't know," Byron answered. "My security clearance isn't high enough. But my guess is that if the base does have a weapon, it would be a pretty ineffective one. The base isn't mobile. In fact, it draws all of its power from the pulsar, and if it were to move out of orbit it would be powerless. So I have to ask myself what good would a powerful but immobile weapon be?"

The others thought about that for a moment, then nodded.

"What can we do?" Ward asked.

"If they've got control of the SCC, they've got control of the entire base!" said Kline. "There's nothing we can do except hide!"

"I disagree," Byron said. He switched again to the schematic view of the base on the command panel. "This black area of the diagram is the sensitive region that houses everything about this base that is considered top secret." He selected a corridor just outside of the blacked out region. "Notice— there's a force field here."

"So?" Ward said with a sneer. "The aliens probably put up that force field to trap whoever is inside."

"Perhaps— but notice also that air recirculation has been stopped in this corridor too."

The others crowded around the panel and looked closely. And indeed the words "AR canceled" appeared in flashing red in that corridor and in all others that adjoined the blackened region of the diagram.

Byron turned to face them. "I think Commander Firin is somewhere in here," he said, pointing to the blackened region. "We need to take back the SCC. Once we have that, we contact the Commander and use the base's defenses to blast the enemy ship in our docking bay."

“Take back the SCC!” Kline exclaimed. “ARE YOU NUTS? They will have force fields all around it, and guards. And in case you haven't noticed, they've already shut down all of the armories. So they'll have all the weapons and we'll just have these!” He held out his phaser. “And with all the surveillance equipment in the SCC, they'll be able to monitor our every move. We won't have a chance!”

“We will have a chance,” Byron replied, “though it will be a slim one. The Romulans may not fully understand our systems yet. If we remove our com badges they can still track us— but only if they use the motion sensors. The surveillance equipment is intended to rely on the com system unless instructed otherwise. So we *may* be able to move about the base unnoticed.” Byron turned to the command panel again and selected the SCC. “You can see clearly that Mr. Kline is correct— they have raised force fields all around the SCC. But only in the corridors!” The others looked and saw that indeed there were no force fields in any of the adjoining rooms. “The default mode of the base defensive system is to erect force fields only in the corridors. Force fields CAN be raised in adjoining rooms, but only if you specifically request them.”

“OK,” Ward said with a nod. “I see your point. But how does that help us? We could use our phasers to blast a hole in one of the SCC's walls, but it would take so long that they would know about it long before we broke through. And they'd be waiting for us.”

“True,” Byron said with a nod. “That's why we can't use phasers.”

“HA!” Kline laughed. “No phasers! What do you expect us to use then? Slingshots? Bows and arrows?”

“Nope,” Byron said with a wry smile. “Just a little old fashioned chemistry.”

Chapter 22: The Zeta Planet

The Rim Quest dropped out of warp drive a few million kilometers from the 2V45903 star system and proceeded to the Zeta planet under standard impulse drive.

“No Plarestan ships within 10 light years!” Captain Voranalla reported gleefully. “Get to work, Mathers!”

“Yes Sir!” Mathers replied.

She began by checking over her diagnostic script. As soon as they were in orbit around the Valencriara's satellite, she contacted the probe to run the script. The probe's internal clock had drifted a bit, but otherwise it was fine. She started the vidscanner and began looking for the Valencriara. At first there seemed to be nothing— and then she saw long wriggly forms gliding through the ocean below. Lucien stepped into the engineering lab. He looked at the vidscreen and saw the long slithery shapes.

“Are those...” he began.

“The Valencriara, Sir— yes,” Mathers answered.

“Somehow I imagined that they would look more impressive.”

“Keep in mind that we're viewing them from a hundred meters overhead,” Mathers replied.

“Can you contact them now?”

“Certainly, Sir.”

Mathers switched on the communications sensors— and they heard the gurgling intonations of the Valencriara's singing.

“They're singing, Sir.”

“You call that singing?” he asked.

“Well, Sir, we're listening to it in a raw, unprocessed mode. If I filter it for the distortions of the liquid...” Her fingers flickered over the control panel, and the gurgles were transformed into lyrical harmonies.

“Are they singing actual words, or do they just sing the notes?”

“They're singing words, Sir,” Mathers said. “But if I try to run the song through the Universal Translator, it won't sound like singing anymore. But I can do this...” She entered a few commands and the text of the singing appeared as subtitles on the vidscreen.

*...Strange object
From beyond the Witherstream
It watched us, it listened
It floated high above us
And then it spoke to us
With a most unmusical voice
Theresa was the name*

*Of she who spoke
And she told us of worlds
Beyond the Witherstream...*

Mathers looked up at Lucien and blushed slightly. "Sir," she said somewhat sheepishly, "I think we should probably let them finish their song before we try to contact them."

"Mathers, we are on an extremely urgent mission. We really can't afford to wait."

"But Sir," Mathers protested, "singing is very important to the Valencriara. It is an intrinsic part of their culture. There are more than 10,000 voices participating in this song. It's their way of bonding as a society. I'm just afraid that if we interrupt them now we may make it more difficult to win their cooperation."

"Hmmm," Voranalla muttered, "I see your point. Alright, Mathers— you've got 1 hour. But any longer and we'll have to interrupt their reverie."

"Thank you, Sir."

Mathers listened, enraptured, as the Valencriara harmonized about the strange beings that had intruded on their lives. They sang about Theresa, they sang about the strange knowledge of worlds beyond the Whitherstream. She noticed that they repeated the same general themes many times, but each time with subtle variations in melody and phrasing.

Mathers decided to use the unexpected slack time to compare the baseline measures of system 2V45903 that the Rim Quest had obtained on their previous visit to the current values. She ran a spectroscopic analysis on the system's two suns— and found to her relief that all measured values were unchanged.

"That's good," she muttered to herself. "At least we know the aliens aren't attacking the Valencriara."

The Valencriara were singing about the inevitable return of the Wralavakkalam. Theresa sat back in her chair and listened enraptured for some minutes. She thought about the strange beings who lived so many kilometers undersea in a world where the very concept of technology was utterly alien and incomprehensible. She thought about their complex and highly profound music, and their equally profound and complex culture, and she realized that she had become very fond of them. She wanted to do anything she could to protect them from harm.

It was clear to her that the Valencriara had begun what was likely a final coda— the conclusion should be very soon. She closed her eyes and listened as the majesty of their chorus grew.

*...There is so much more
Beyond the Witherstream
Than we have known.*

*We have much to learn
About things we cannot see,
But the Valencriara will always
Remain strong, proud, and free!*

At last their singing reached a mighty crescendo and then there was silence.

Mathers had not had time during their last visit to learn how to identify individuals among the Valencriara, so as she watched their images swim beneath the probe, she was unable to determine which of them was Thula.

“Thula?” she asked. “Thula are you there? Thula, this is Theresa. May I speak with you?”

She continued asking for Thula for several minutes and still there was no answer. Had something happened to him? Had the probe failed to transmit? She checked the probe's communications system again— it was fine.

“Thula, this is Theresa,” she said again. “Are you there?”

“Yes, Theresa, I am here,” Thula replied. “You have returned!”

“Yes, Thula, we have returned. I wanted to thank you for what you provided the last time we were here. The mathematics that you gave us enabled our mathematicians to find the image that was embedded in the ripple effect. And when we saw the image, we realized that it was sent from another dimension by someone we knew. He was trying to send us a warning— but his message was cut off before he was finished. So I have returned because we need your help again.”

“Oh?” Thula said. “What can we do to help you?”

“We are trying to solve a problem that seems very difficult to us,” she said. “It is a type of problem that we think you might be able to help us with.”

“What type of problem is it?”

“It is a problem in what we call physics. We are trying to find some beings that are attacking us. We don't know where they are, and we don't know how to find them. But they are causing tremendous damage to our universe. They are destroying stars in our universe. And we don't know how to stop them.”

“What can we do to help?” Thula asked.

“We know that the Valencriara do not have a knowledge of physics. But our laws of physics are all expressed in mathematics. We are hoping that you will be able to use our knowledge of physics to solve a mathematical problem that we are unable to solve.”

“I see,” Thula said. “When you were last here, Nortolinnta and Yllerian, among others, studied your mathematics and your physics, as you call it. They have said that they understand the mathematics behind your physical theories, but they don't understand its motivation.”

“Yes, that's exactly what we suspected. But your command of mathematics is so great that we think you may be able to see something that

we've missed. Our best experts on this have tried to put together a mathematical description of the problem, and I have brought that with me."

"Theresa, I don't want to sound rude, but we really don't understand your world at all. We have our Whitherstream, and that is really all we know. When your probe, as you call it, entered our world, it was really the first indication we have had that there is anything beyond the Whitherstream. I don't know that we would ever be able to help you with a problem like that, Theresa."

"I understand, Thula," Theresa said. "I know I am asking something of you that may very well be impossible. But we honestly don't know what else to do. We have tried to solve this problem with everything at our disposal and we don't know how to solve it."

"And have you studied the message in the ripple effect too?"

"Yes, the image, yes we did," Theresa said. "We listened to everything he said. He tried to give us a warning, but we didn't have enough of the original message to hear what he wanted to warn us about."

"There was an image, yes," Thula replied. "But there was another message in the ripple effect that was not an image. "Did you study that message too?"

"*Another* message? No, I don't think we even knew there was another message."

"I see. We were unable to understand anything about it. It was comprised of a large number of symbols..."

"Writing!" Theresa exclaimed. "It may tell us exactly what we need to do! How did you find it?"

"The main image was found in a hyperharmonic streamwave, as you know. But there were higher harmonics that encoded the second message."

"Wow," Theresa breathed. It was shocking enough to realize that a written message was also embedded in the ripple effect. But it was even more stunning to realize that no one at either Starfleet or the Alliance Academy had found it. The Valencriara were full of surprises! "I... I don't know what to say, Thula. Our best people didn't find a message that the Valencriara were able to find easily. Perhaps that best illustrates how much we need your help!" She touched the com panel. "Captain! Captain Voranalla, Sir! We need to talk to Commander Firin immediately!"

"Yes Mathers? What about?"

"The Valencriara discovered a *written* message encoded in the ripple effect that apparently none of our own people found!"

"Really?" Voranalla gasped. "Wow! I'll get right on it!"

"So Thula," Theresa continued. "I have our best people looking into the encoded message. But in the meantime, someone is destroying stars in our galaxy. If the message tells us what we need to do, then the problem is solved. But I don't think we can afford to wait to find out. Even if you don't think you can help us, would you be willing to help yourselves?"

"What do you mean, Theresa?"

“These other-dimensional aliens may try to attack one of the stars in your own star system. If they did, you would only have a small fraction of a cycle before the star explodes and destroys everything in your system.”

“I see. Very well then, Theresa, we shall study it.”

“Thank you, Thula, I greatly appreciate your help! I have given you the ability to read the part of our computer that contains the statement of the problem. And just one more thing. We have also provided everything we know about the ripples in hopes that you may be able to discover something else that we haven't.”

Thula tunneled to Nortolinnta and Yllerian and soon Mathers could see that they were indeed accessing the problem statement. Now she could only hope that they would be able to find an answer in time.

Chapter 23: Chemistry

“Don't destroy them!” Byron said as Jason, Oliver, and Meryl removed their com badges. “Just leave them here. We want them to think that we died of the gas. We don't want to raise any suspicions.”

He led the others out into the corridor and down to the first Jeffries tube. He opened it with his security code and they climbed up to the third level, latitude North 45. They looked out the window and saw people strolling about, apparently oblivious to the events that had transpired just one level below.

“We need to go up two more levels,” Byron said. “I don't think we should take the turbolifts, since the sensors will recognize that we are not wearing com badges and will set off an alarm.”

“Agreed,” Ward said with a nod. “Let's keep going.”

“Are you doing OK?” Byron asked Susan.

“I'm fine— don't worry about me,” she said.

They climbed up to the next level-- Latitude North 60-- and looked out the window. Again they had a good view of the promenade. But on this level they could see several security officers hunkered behind a shipping cart that appeared to be full of vegetables. And they were firing... at a much larger contingent of Romulan soldiers! They could see a couple of security officers sprawled lifelessly on the floor in front of the car. From what they could see it was just a matter of time before all of the security officers were either killed or captured.

Kline rushed to the door, but Byron restrained him.

“We've got to help them!” Kline shouted.

“No,” Byron said firmly, “we *can't* help them.”

Kline stared into Byron's eyes.

“There are too many Romulans!” Byron said. “If we go out there now we'll lose our chance to take the SCC!”

Kline took another look out the window, then dropped his hand. “You're right. There's too many. We just don't have enough weapons.”

“Come on,” Byron said. “We've got to keep moving.”

“Maybe not,” Susan said.

Byron wheeled around and looked at her.

“What do you mean?” he asked.

“Well, I know where we are,” she said. “There's a restaurant just 20 meters down the corridor.”

“Oh, good suggestion,” Ward sneered. “We can kill the Romulans with broccoli and cream cheese.”

Kline snickered; Reins chuckled.

“I know that restaurant,” Susan said. “It's owned by Karmal Ojiereff. He has the finest collection of antique phasers and laser rifles anywhere.”

Byron looked at Kline, who looked at Ward, who looked at Reins.

“Phasers?” Kline asked.

“Laser rifles, you say?” Byron asked. “Do they work?”

“Oh, yes,” Susan said. “Karmal prides himself on the fact that they are all fully operational.”

“OK,” Byron said. “He's got phasers. How can we use them?”

Kline took another look out the window. “The Romulans are advancing,” he said. “And they've left the restaurant unprotected.”

They looked out the window and could see that the Romulans were closing in on the security officers.

“Alright,” Byron said, “we rush down the corridor into the restaurant. We get the phasers and we attack the Romulans from behind. Hopefully we have the element of surprise and we are able to get them in a crossfire.”

Ward looked at Kline. Kline looked at Reins. Reins looked at Byron.

“We'll cover,” Kline said.

Byron nodded, and so did the others.

“Ready?” Byron asked. He pushed the door open and they rushed out into the corridor, turning quickly to the right and running the short distance to the restaurant. There were a number of lifeless Romulan bodies strewn near the entrance, and one human dressed as a chef who had an enormous hole in his chest. His blood-spattered hands held an ancient Klingon phaser cannon.

“Karmal,” Susan said, pointing to the chef.

A disrupter blast slammed into the wall just inches from Byron's head, showering the corridor with sparks and debris. Another blast ripped into Kline's shoulder, throwing him to the floor in agony. Byron wrestled the cannon from Karmal's grip and returned fire. FOOM! The blast tore a fist-sized hole in one of the Romulans and threw him forward 5 meters, knocking down 3 other Romulans like bowling pins. He inched closer to Kline.

“Take my hand!” Byron shouted.

“Forget it, Sir,” Kline said through clenched teeth. “Leave me— I've had it.”

Byron grabbed Kline's leg and tugged him toward the restaurant. Just as they reached the door another disrupter blast tore into the wall. Byron stopped long enough to fire again. He had barely passed his hand-to-hand combat training at the Academy, but had earned top honors in sharpshooting. He took time to aim, then FOOM! The cannon struck the outstretched hand of one of the Romulans— and the disrupter he was holding exploded! Ten Romulans were blown to pieces.

Ward and Reins followed Susan into the restaurant and she led them to the cabinet that contained Karmal's collection. The doors had been shattered, but it contained a hoard of fine weapons. Susan selected a dainty Qualandrian disrupter— made for a lady, but with enough power to vaporize a block of pure neutronium. Ward's eyes feasted on an old Starfleet proton beam bazooka— powerful enough to punch through bulkheads in one blast. Reins indifferently grabbed an old Plarestan phaser rifle— made for a marksman but with plenty of punch. Susan went toward the kitchen and got the Emergency Aid kit. Then

they quickly gathered around Byron, who had managed to pull Kline just inside the restaurant.

"I'll take care of Kline," Susan offered. "I've had Emergency Aid training."

"Good!" Byron said. Some of the Romulans had split off from the main group and were returning to retake the restaurant. "Is there any other way out of here?"

"Of course!" Susan said. "That panel opens into the adjoining room— it's a holodeck theater, I think." She pointed at the wall just behind them.

"OK," Byron said. "Reins, you and Ward go through into the next room. I'll stay here to draw their fire. Then you come up from behind and we'll get them in a crossfire."

Reins and Ward nodded, then ducked out through the side panel.

FOOM! With another blast from his cannon, Byron took out two more Romulans just as they reached the entrance of the restaurant. Then he crawled along the floor toward the entrance and looked around the corner. He could see that a dozen Romulans were engaged with the security officers, who seemed to be holding their own. The rest were divided into two groups— one group of 10 that was advancing along the adjacent wall toward his position, and another group of eight that was running along the far wall of the promenade. He surmised that this latter group intended to approach the restaurant from the other side, trapping them between two opposing forces. Byron took aim just over the heads of the group advancing along the far wall. FOOM! The blast knocked a huge hole in the wall and threw shrapnel out in a broad arc that knocked most of the Romulans to the floor. He knew they would only be wounded, but it would be enough to buy some time. He took aim on the one he judged to be the group's leader. FOOM! Greenish Romulan blood splattered all over the wall.

The second group was within 5 meters of the restaurant entrance. Byron stood up and fired once again— and blasted a hole through the first Romulan. Just then Ward and Reins burst into the promenade and opened fire. The Romulans wheeled about in confusion. FOOM! FOOM! FOOM! With another three blasts Byron took out 3 more and knocked down 2 others. Ward and Reins finished off the rest. Byron turned toward the group on the far side of the promenade and started firing. FOOM! FOOM! The Romulans scrambled to take cover in a supply office, and Byron slipped back behind the restaurant door.

Ward and Reins tumbled inside after him.

"Good work!" Byron said.

Kline was standing, his left shoulder bandaged and his right arm cradling a rare Ferengi positron field rifle. "I'm good, thanks to her," he said with a nod toward Susan.

"Good," Byron said. "Follow me."

He led them through the side panel into the holothheater. At the entrance, he paused and turned toward them.

"There's about a dozen attacking the security guards. I say we rush them and take them out. We run 5 meters toward them, stop, and fire on my signal.

We'll catch them by surprise, and that'll give the security guards the opportunity they need to break free. Ready?"

Everyone nodded.

"Let's go!"

They burst out of the theater entrance, rushed forward and stopped. Byron threw a fist into the air and they opened fire. They killed three Romulans before any of them had a chance to react. Several Romulans wheeled around and fired wildly, but they kept firing with grim determination and cut down every Romulan who tried to return fire. The others were caught in the crossfire. When the last Romulan fell Byron rushed toward the security officers. There were half a dozen dead and another three wounded. He waved Susan over.

"Engineer Byron Smythe," he said to the young female Lieutenant with fiery green eyes.

"Lieutenant Jacobs," she said. "Thanks— we would all have been killed if you hadn't helped out."

"Another group of nine ducked into an office over there," Byron said as he nodded toward the far side of the promenade.

"We'll get 'em," she said.

"We'll keep them pinned down," Byron promised, and he signaled to the others to open fire on the office entrance.

Lieutenant Jacobs led her team along the wall. She signaled to one group to slip into the adjoining office. The others followed her along the wall of the promenade. Byron and his group continued firing until Lieutenant Jacobs reached the entrance to the office— then they stopped. Jacobs rushed inside followed by half a dozen of her officers. Several moments of silence passed. At last Jacobs appeared, shrugging her shoulders. Byron and the others walked over to talk to her.

"They're gone," she said. "They must've slipped out the back while we were busy finishing off the main group."

"Then they'll be reporting everything to their commander shortly," Byron said. "And they'll come back with an even greater force."

"We'll be ready for them this time," Jacobs said. "They caught us completely by surprise. We knew the base was under lockdown, but we didn't suspect that the base had already been infiltrated. They had us surrounded before we even realized there was a problem. They opened fire and quickly pinned us down behind that little delivery car. I called for backup, but no one ever came."

"They're Romulans," Byron said. "I believe they have taken control of the SCC."

"No wonder there was no response to our calls to the SCC for help!" Jacobs said.

"They released anastiscene in at least 3 levels below this one. We were on our way up to take back the SCC when we saw that you were in trouble. Can you help us?"

“Take back the SCC?” Jacobs said with alarm. “They’ll have force fields and guards and they have control of every sensor on the base! We’ll never get close enough to fire a shot.”

“Unless we don’t take the approach that they expect,” Byron said.

Jacobs looked at him with an expression of puzzled interest. “What are you planning?”

“As you said, they have raised force fields— but probably only in the corridors, not in all of the adjoining rooms.”

“And so all we have to do is blow a hole in the wall of an adjoining room and we can take them out in one surprise attack!” Jacobs enthused. “But for that we’ll need explosives!”

“Right,” said Ward. “Do you know where we can get any?”

“No,” Jacobs said. “All of the armories are under lockdown. We couldn’t get so much as a hand grenade.”

“So we’re just going to have to make our own,” Byron said.

“But how?” Ward asked. “We can’t use a replicator, because they’ll be under lockdown too. Besides— even if we could use a replicator, it will only work if you were wearing your com badge, and that means the Romulans would be alerted as soon as you order it.”

“Oh, but a replicator is exactly what we’re going to use,” Byron said. He directed them into the supply office which contained, among other things, an industrial replicator. “OK,” he said to Jacobs, “I want you to order 2 kilograms of sulfur.”

“Sulfur!” Jacobs exclaimed. “Whatever for?”

“And you,” Byron said, pointing to another of her officers, “I want you to order 15 kilograms of potassium nitrite.”

“Oooh!” Jacobs said. “I get it! Ancient weapons explosive!”

“Gunpowder,” Byron said. “Exactly. And you,” he said, pointing to another of Jacobs officers, “you will order 3 kilograms of charcoal.”

“So by having different people order the materials separately,” Susan said, “you think the replicator won’t figure out that we’re trying to make.”

“And that it therefore won’t alert the SCC,” Byron said with a grin.

They ordered the materials and the replicator obediently provided them in precisely the required quantities.

“I think we should split into 2 groups,” Byron said. “We approach the SCC from two sides. We coordinate our attack for, say, 30 minutes from now. Each side sets a charge sufficient to blast a hole in the wall of the SCC. We burst in with everything we’ve got and we’ll take them completely by surprise— but only if we maintain absolute silence from now to the moment we detonate the charges.”

Jacobs looked intently at Byron. The others of her command all nodded their assent. Kline, Ward, and Reins concurred.

“Agreed!” she said with a solemn nod, and she took off her com badge and placed it on the counter.

Chapter 24: The Romulans

Argov struggled to stay awake in the stifling heat. There were restrooms throughout their section, so they could rely on a water supply for another few days— but early on Argov had ordered that all water be rationed. And they had only another four days worth of food— just the emergency rations with which each independent segment of the base was provisioned in case of a catastrophe. He had decided to settle in for a lengthy siege. For the time being he controlled the heart of the station— the part that represented the purpose and importance of the base. But in the event that the Romulans were to find a way through his force fields he would have no defense. His only option would be to shut down the base's shield generators. That would destroy the base in about a thousandth of a second as the pulsar's tremendous electromagnetic field ripped through its hull. Everyone on board would be roasted as trillions of volts of electric current seared everything on the base.

Since the Romulans controlled the Security Command Center, they had full operational control of the entire base— except for Main Engineering. And because they had managed to have Argov declared a danger to the base, it would now be virtually impossible for him to convince anyone outside Main Engineering that he was acting in the best interest of either the base or the Alliance.

He and his team had reviewed their options, such as they were. Fortunately, Main Engineering had control of its own set of internal sensors. And while they didn't have the full range of surveillance that the SCC had at its disposal, they could view most every public place on the base. They had seen several Romulan ships pull into the docks. They had seen the gassing of three levels. They had seen several hundred Romulan troops disembark from the ships and begin exerting control over an ever-expanding region around the SCC.

They didn't dare try to leave the protection of their force fields— the Romulans now controlled every major corridor leading to Main Engineering, so they were pinned down. Their only hope was that some other group of base officers would somehow be able to retake the SCC. His plan was simply to wait for the *Rim Quest* to complete its mission. Once that was done, he would hold the base as long as it might be of use to Starfleet in combating the alien influence that was destroying stars throughout the galaxy. And then, if there were no other options, he would prevent its secrets from falling into the hands of the Romulans by bringing down the base's shields to destroy it.

“Sir!” said Duty Officer Paula Ronwold. “Sir! We've got a communication from the Romulan Commander! He wants to talk to you!”

“Very well,” Argov said. “Set it up in the small observation room. I don't want him to be able to judge our size or our strength.”

“Yes Sir!” Officer Ronwold said.

Argov waved to Caralasham, who rose unsteadily from where she was reclining to join him in the observation room. The heat was especially difficult for Caralasham, who found the higher temperature difficult to bear.

They entered the room and Argov directed Caralasham to a seat in the corner which the vidscreen camera would be unable to see. He pressed an icon on the control panel and the vidscreen jumped to life. The visage of a Romulan commander appeared.

“Ah, Commander Firin! At last we have a chance to meet! Allow me to introduce myself. I am Commander Nuralleen Vertosh. How do you do?”

“I'm well, Commander,” Argov said with a genial tone. “Why have you commandeered my base?”

“I might ask you why the Alliance has constructed this magnificent weapon in neutral territory,” Vertosh said.

“Ah, so you mistakenly believe that it is a weapon!” Argov rejoined. “Then no wonder your actions have been so brazen and so foolish.”

“What else could it be?” Vertosh said. “It draws its power directly from a pulsar. It has stabilizers that dampen even the most minute vibration. It can only be an extremely powerful weapon with immense range. The stabilizers, I presume, are designed to give it unprecedented accuracy over even the greatest distances.”

“Illogical, Vertosh,” Argov said. “You're forgetting that the base revolves inside the pulsar's magnetosphere— which field is strong enough to distort any particle beam it might generate, thereby rendering it useless. You're forgetting that our orbit is so close that about 10% of the sky is obscured at any one time. And you're forgetting that the base is absolutely dependent on the pulsar for power. So it is not mobile and cannot be moved out of the pulsar's orbit.”

“Well then, Commander,” Vertosh said, “it really can't hurt for you to tell me the purpose of this base.”

“No, actually, it wouldn't hurt to tell you— if the Romulans were our allies,” Argov said. “It wouldn't hurt because this base is not a weapon. But by your actions it is obvious that you have only hostile intentions. So I'm afraid I won't be able to tell you anything.”

“I hope you noticed that the base is now occupied by several thousand highly trained Romulan warriors” Vertosh gloated. “So I hope you realize that you're going to enjoy our company for a long time.”

“And I hope you realize that I can destroy the base whenever I please. All I need to do is to shut down the shields and this base will be ripped apart in a few milliseconds by the pulsar's electromagnetic field.” Argov paused a moment to let that observation sink in. “So I really don't have to answer any of your questions.”

Vertosh scowled. “Perhaps you'll change your mind when you see the consequences of your intransigence.” He turned and signaled to one of his officers. “May I direct your attention to this view of the Latitude South 15 Promenade.” The vidscreen switched to a view that showed a broad walk filled with hundreds of people. Then a fine yellowish mist began to descend from the ceiling— and people rushed madly toward turbolifts, offices, service tubes, anywhere that might protect them from the gas. But few of them were able to escape and most quickly collapsed on the floor, clutching in agony at their

throats. Argov winced and dug his fingernails into his thighs as he watched them writhe and thrash about wildly and then finally lie still.

“You know what that gas is,” Vertosh sneered. “It’s anasticene. You know it’s deadly. You know how excruciating is the pain it inflicts. How can you allow this? How can you permit your personnel to suffer such agony? Tell me what I want to know in the next 30 minutes, or I’ll release the gas on latitude South 30!”

“Then I will give you 29 minutes, Vertosh, to evacuate my base or I will destroy it!” And he switched off the vidscreen.

Chapter 25: Equations

Mathers received a message from Commander Firin. "Starfleet had already found and retrieved the embedded message," he said. "It appears to be a chronicle of Vger's travels. It's enormous— and it's a fascinating read. It represents more than 100 years of wanderings through universes and dimensions beyond imagining. But it doesn't really tell us much about how to put a stop to these attacks on the stars. We are sending you the message in its entirety. Firin out."

Theresa had monitored the conversations of the Valencriara for more than 10 hours and was beginning to feel quite weary. Some of it she could make out. They were grappling with the equations of physics and were trying to understand physical realities that they could never experience. And they were frequently perplexed.

"I don't see how any of this relates to the Whitherstream," Nortolinnta complained. "I can understand their equations, and I can visualize the problem they want us to solve. But I cannot believe that this mathematics of theirs applies to the world of the Valencriara."

"Theresa has assured us that it describes our world as well as hers," Thula replied. "I know it seems strange, but we have learned a great deal that is new and unexpected since she has entered our world."

They quickly absorbed the content of the problem statement, but they kept returning to it as if they couldn't remember it. They never asked any questions of Theresa but instead seemed quite content to work through it themselves. Theresa was concerned that they might not be making any progress. After all, they not only had to solve a problem that the finest mathematicians of the Federation were unable to solve, but they had to try to understand physical phenomena that they could never experience.

She had amused herself by reading from Vger's chronicles. There was far too much to absorb fully— she just browsed at random. Very little of it made sense to her— it described realities she couldn't visualize, let alone comprehend. "Probably this is how the Valencriara feel as they try to understand our physics," she thought. Perhaps it would be best to leave the interpretation of the chronicles to academics at the Federation and Alliance Academies.

Should she interrupt Thula to ask if they had made any progress? The aliens were still attacking the galaxy's suns. They had better act or it would soon be too late.

"Thula?" She waited for what seemed like an age. "Thula?"

"Yes, Theresa," came the synthesized reply.

"I was just wondering if you have been able to make any progress?"

There was a long pause. "Hmmm," Thula said. "We think we understand much about the equations. We know how they are related to each other. But we still don't understand what they mean. And we don't really have any idea how to answer the question you have posed."

"I see," Theresa said with a sinking feeling. "Listen, I talked to our experts about the encoded message you said you found in the ripple effect. It turned out that they had already found the message and had decoded it. It's a record of the travels of the person who sent the message. We call him Vger. He visited a number of other dimensions over a period of more than 100 years. I don't know if it will help, but I have made that available to you too."

"Interesting," Thula replied. "I would have to say, Thresa, that I don't know that we are going to be able to help with this problem. Your world is very strange to us. We find almost everything about it incomprehensible. We certainly understand the concept of mathematical dimensions. But it is really beyond our capacity to imagine traveling to other physical realities in other dimensions."

Theresa sighed. "Yeah, I know. I have the same problem. I understand some of the mathematics behind our physical theories, but the concept of other physical dimensions is hard for me to understand too."

"Your equations of fluid flow are of most interest to us," Thula offered. "As I understand it, our Whitherstream is a fluid. But we do not understand fluids as you do. To us, the Whitherstream is a home, it is our world. We cannot imagine life outside the Whitherstream. So for us to study equations that are supposed to describe a world beyond our own— well, we just cannot imagine it."

"I understand. Well, maybe if you were to read the chronicles of Vger's travels you might find something there. Thanks for your help."

"I regret that we were unable to provide any help, Theresa. Are we in danger?"

"No, I don't think so, Thula— not at present. The aliens aren't attacking the stars of your system. Not yet, anyway."

"And... these stars," Thula rejoined. "If either of them *were* to collapse..."

"Then your planet — Whitherstream and all— would be destroyed when the star explodes."

"I see," Thula said. "We will read this Vger's travel journal."

Theresa described to him where the journal was stored and she saw that the Valencriara began to access it.

Vger. It too was something beyond imagination. A ship the size of a large planet with enough power to destroy every ship in Starfleet. And populated by machines! Strangely curious machines, too— machines that traveled across the galaxy to find the beings who had created an ancient and comparatively simple probe. They had apparently mastered everything there was to know and to experience in our galaxy. It was Decker's ability to believe in other dimensions that enabled them to begin their travels by leaving the dimension of this galaxy and journey to another.

"So they really didn't know what they were getting into," Mathers muttered to herself. "They traveled to a universe or dimension or whatever where the laws of physics were very, very different. Something about the new universe to which they journeyed made it very dangerous to Vger. Perhaps it was something Vger could not have predicted."

“Report Mathers,” came Voranalla's voice over the com.

Theresa winced. “The Valencriara say they don't really understand our physical laws at all. I wish I had better news, but...” She shrugged.

“Are they going to be able to help us or not? It's your call.”

“I... I guess not, Sir.”

“Then we'd better get out of here.”

“But Sir!” Mathers exclaimed.

“But what, Mathers?” Voranalla said. “Either they can help us or they can't. And if they can't help us, we'd better leave before a Plarestan patrol ship discovers this forsaken sector and declares it for the Plarestan Empire.”

“But... Sir!” Mathers stammered. “If we leave now we are condemning billions of people to death!”

“I can't help that, Mathers. We had a mission, and we failed. Now it's time for us to return to base.”

“Sir!” Mathers pleaded. “Just one more hour! Please Sir!”

“Can you guarantee me that you'll be able to solve this in one hour?” Voranalla demanded.

“No, Sir,” Mathers whispered. “No, Sir, I can't. I just believe that the Valencriara are our best chance for solving it. So if we leave now I'm sure it won't get solved, and stars throughout the galaxy will continue to be destroyed. It's only a matter of time before one of them is Earth's sun, or Goridon's.”

There was a long pause, during which time Mathers could feel her stomach gnawing on itself. “Alright,” Voranalla said. “You've got one hour. But if you haven't got it solved in 60 minutes, we're leaving this sector.”

“Acknowledged, Sir!”

Mathers felt relieved. But she knew there wasn't really any reason for her to feel that way. The fact was that she didn't have any idea what to do. And she didn't think that Thula and the other Valencriara knew much more than she. Perhaps she needed to go back to the beginning.

She turned to the image of Decker encoded in the ripple effect. “This universe,” Decker had said, “has physical laws that are very different from those of the universe we left. Gravity is different here.”

“Hmmm...” Mathers muttered aloud, “perhaps that's a useful clue. Somehow these aliens are able to send neutralinos across the barrier between their universe and ours. And they are able to direct them into the cores of stars. But everything I know about the multiverse theory— the very *little* that I know about it— says that particles are bound extremely tightly to their own dimension, and that to break that bond requires immense energy. So... how are these aliens able to break the bond? Besides, neutralinos are extremely heavy particles. So to transport enough neutralinos to change the nuclear chemistry of a star would require an immense amount of power, even if they were transported within the same universe. Where do these aliens get all that power? Hmmm... Gravity works differently. Maybe that means that neutralinos of their universe are a different type of particle than they are in our universe. Maybe they are more like

neutrinos. Computer!" she demanded. "Access the problem statement in the working storage area named 'Valencriara'. How much power would be required to transmit enough neutralinos into the center of a star of 1 to 2 solar masses to destroy the star in the manner described in the problem statement?"

"Working..." came the mechanical reply. "4.96358 times 10 to the 19th joules."

"Wow!" Mathers breathed. "Obviously that's more power than is available even from the Ariel! OK, computer, how much power would it take to transport the same number of neutrinos?"

"Working... 7.34241 times 10 to the 15th joules."

"Hmmm... That's still too much. What if the particles transported were photons instead?"

"2.04536 times 10 to the 11th joules."

"Well!" Mathers said, "That's not too bad! The Ariel has at least that much power! Maybe these aliens really look a lot more powerful than they actually are!" Mathers returned to the probe's command panel and reestablished the com. "Thula," she said. "Thula, are you there?"

"Yes, Theresa, I hear you," Thula said.

"Listen, I've had an idea, I think that maybe the aliens are not nearly as powerful as they seem to be."

"Why would you think that?"

"What we see happening in the stars that are being destroyed is that the population of neutralinos in their cores is increasing dramatically. But neutralinos are very heavy particles. So it would take more power than is feasible to transport that many neutralinos into a star's core. But if the particles that were transported were photons instead, then it would be easy for devices that we have to transmit the number of particles required."

"And that would define a binding condition for the interdimensional boundary," Thula concluded.

"Right!" Mathers said. "Decker— he's the person who sent us the message encoded in the ripple effect— Decker said that gravity works differently in that universe than it does in ours. So maybe their photons are the equivalent of our neutralinos. But is that enough of a condition to deduce the location of these aliens?"

"I don't think so," Nortolinnta interjected. "I have been working on the problem of defining the interdimensional binding conditions. I have identified a system of equations for all possible boundaries between our universe and another. And unfortunately the assumption of an equivalence between a pair of particles isn't enough to uniquely identify just one possible universe."

"I see," Mathers said. "What kind of condition would you need?"

"Oh, any of a number of different conditions might be enough," Nortolinnta replied. "But we must be sure of it."

"Hmmm..." Mathers mused. "OK, but how were these aliens able to find our universe so easily?"

"Well that's obvious, isn't it?" Thula replied. "This person Decker showed them the avenue to our universe when he sent his message."

"I can't believe that, Thula," Theresa said. "Decker sent us the message to warn us, to tell us something about the aliens and how to combat them. I don't think he would have contacted us unless he knew that the aliens would be able to figure out where he came from and how to attack us."

"So then how *did* they determine our location?" Nortolinnta asked.

"Well, Decker's ship would have had to counteract the differences of gravitation," Theresa guessed. "That would require a lot of power and would produce what I imagine would be a very readily identifiable energy signature. I think that Decker thought that the aliens must have been able to measure this signature, and he concluded that they could easily deduce the nature of the universe from which he came."

"So that would explain how the aliens were able to deduce the binding conditions for the two universes," Nortolinnta said. "But we don't have the advantage of seeing Decker's ship from the vantage point of their universe."

"Yeah, that's true," Theresa agreed. "So is there anything else that we do know about that would tell us about the binding energies?"

"What about the message itself?" Uriallannu asked. "What would have been required to send it?"

"Right!" Mathers exclaimed. "Right!!! The message! Isn't that the other clue we need? How was Decker able to send a message that caused a ripple effect throughout at least 10,000 cubic light years of the galaxy?"

"Yes," Uriallannu replied, "I wondered about that too. I don't know much about your communications devices, but I assumed that the message must have been sent with a device that would have sent a normal signal through the other universe."

"Right," Mathers said. "In our universe we would use what we call a subspace transmitter. It enables us to send waves of displacement through subspace."

"So the differential between the subspace displacement in their universe and the resulting displacement in our universe adds another binding condition," Uriallannu deduced.

"Computer!" Mathers said. "Compute the differential between the subspace displacement of a normal subspace transmitter and the displacement of the ripple effect."

"5.32034 times 10 to the 23rd," came the immediate reply.

"So Nortolinnta," Mathers rejoined, "is that enough to define the binding conditions?"

"Perhaps," Nortolinnta replied. "I will think on it."

"Mathers!" came Voranalla's excited voice.

"I've still got 23 minutes by my count, Sir!" she replied.

"Forget about your minutes," Voranalla replied. "We've got company!"

"Plarestans?" Mathers asked anxiously.

“You got it! They're about 100 million kilometers away, but they're headed straight for us on impulse power. They should be here in less than 20 minutes!”

“This is important Sir!” she said. “We have to stay here! We've almost got the answer Sir!”

“It doesn't matter now, Mathers,” he said with grim finality. “We've got to get out of here now!”

“No Sir, we don't! We have to stay here! We have to wait until the Valencriara solve this problem! It's more important than our lives, Sir!”

“Grrrrr,” Voranalla growled. “You're right, Mathers— we'll stay. Just make sure you find the answer!”

Minutes ticked by— Theresa monitored the conversations of the Valencriara and could hear nothing enlightening. Apparently Nortolinnta was deep in thought. And then...

“Theresa,” came a synthesized voice over the probe's communication array— it was Nortolinnta! “Theresa, I think I have the answer. Yes, the message itself is precisely the parameter we needed. I now can tell you how to find the universe from which you are being attacked. And I believe that will help you to find a way to fight back.”

“Great, Nortolinnta!” Mathers sighed. “Great! But don't tell me— tell the computer!”

More precious minutes slipped by as Nortolinnta explained his system of equations and the deductions he had reached. Mathers tried to follow his explication, if only to ensure that Nortolinnta left out nothing of importance. But she really had no idea what Nortolinnta was saying. And there was no way she would be able to tell if he had left out something important.

More than once it appeared to her that Nortolinnta had explained the same thing twice. Was it because he had to correct a previous error? Or had he in fact explained two different equations for two different purposes? It was impossible for her to know. But implicitly she trusted the Valencriara. She respected their abilities, and she believed they would do an excellent job. Besides, they had a stake in this too.

“The analysis is complete,” Nortolinnta reported.

“Thank you, all!” Mathers burred. “Thank you! We have to leave this area now because we're under attack. But I'll be back to tell you what we have done.”

“We are pleased that we could be of some help. Both for your sakes and ours.”

“Thanks again, and goodbye.”

She set the probe to slumber mode, then disconnected its com link and punched the bridge com link. “Captain!” she said. “We've got it!”

“OK.” Voranalla did some quick calculations and set the warp engines to engage for 3 seconds.

“I'm sending the Valencriara's analysis to Commander Firin!” Mathers said frantically.

Voranalla engaged the warp drive and headed straight for the asteroid belt.

Chapter 26: Deadline

“Twenty-eight minutes, Sir!” said Officer Ronwold.

Argov stared numbly at the blank vidscreen before him. In another two minutes the image of that vermin Vertosh would distort the screen to demand his surrender— unless he kept his promise and destroyed the base first. He had just another minute to decide if he really wanted to do that. He could see the Romulan ships in docking bays around the perimeter of the base. He could see Romulan soldiers patrolling promenades on every level. He knew that if he destroyed the base it would take out every one of the Romulan vessels. And he knew that whatever might appear on that vidscreen, he couldn't trust it.

His only option was to wait until the moment that Vertosh released the gas. If in fact the Romulans had evacuated, at least he would be sparing his crew a terrible, excruciating death.

He thought once more of Melissa and Dorain. He had made a pledge to himself. He had sworn to gain their release. Now it seemed impossible that he would ever be able to fulfill that promise. At least they would be able to live out their lives on Qualandria. Perhaps each would find a measure of happiness.

“Sir! Sir!” said Officer Ronwold. “We have a message from the Rim Quest Sir!”

“Pipe it through!” Argov ordered. “And cancel the countdown to the destruction of the base! And contact Professor Mair of the Starfleet!”

The face of Engineer Mathers appeared on the vidscreen. “This is Engineer Mathers. The Valencriara have solved the problem! I've attached a file containing their solution. We're under attack— there's a Plarestan patrol ship...” Mathers was thrown to the floor by the force of a blast; she struggled back to her feet. “They're closing in! Mathers out!” The vidscreen went blank again.

“I've got Professor Mair online!” Ronwold said. “And Commander Vertosh is demanding to talk to you!”

“Put the Professor on! And tell our dear friend Vertosh...” Argov struggled for the right word. “Tell him I'm occupied.”

The vidscreen flickered briefly, then brightened to reveal an empty chair.

Prof. Haywood Mair strode into view and settled into the chair. He looked weary but alert. “Commander!” he said. “Nice to see you again! What have you got?”

“We just received word from the Rim Quest that the Valencriara have solved the problem! “

“Wonderful! Things are finally looking up!”

“Perhaps from your perspective, Sir,” Argov dissented.

“Oh, yes Commander, I didn't mean...”

“Sir!” came Ronwold's anxious voice.

“Not now, Ensign!” Argov scolded.

“But Sir!” Ronwold insisted. “It's Vertosh Sir! He says he has released the

gas!"

Chapter 27: Countdown

Byron looked through the small window of the Latitude North 75 service tube. At this level, the promenade was little more than 10 meters in width. He couldn't see anyone in the corridor. He held a hand scanner to the window to get a reading.

"There's no one within 200 meters," he said to the others in the group. "The corridor we want is about 15 meters from here. Let's go!"

He opened the door and they slipped out quickly and quietly, Kline and Ward pulling an anti-grav cart loaded with the explosive. They found the corridor and went more than 30 meters down it into another corridor on the right, then 20 meters further to a door on the left side with an undistinguished sign that read simply "Supply room".

He raised his phaser canon and stepped in through the door, then scanned the room and saw that it was empty. He strode to the back wall and scanned it for energy signatures.

"Nothing," Byron whispered. "It's just as I suspected. They haven't figured out that the force fields have only been raised in the corridors. OK, let's set the charge."

They had fashioned a hemispherical shell to hold the charge. The shell had a magnetic seal around its edge. They clamped the shell to the wall and set the detonator for the five minutes that remained until the appointed time of their attack.

"Now we wait," Byron breathed.

"You know that blast will be so powerful," Ward said, "that anyone in this room will be killed, right?"

Byron nodded. "Yes, I know. That's why we're going out into the corridor when we're down to one minute."

"Aaah."

They sat in silence on the floor of the room— there was no furniture, only a few shelves packed with power cells and spare parts. They watched tensely as the detonator counted down. Two minutes to go. When the bomb blew it would take out most of the wall. Jacobs and her team should burst through a wall on the opposite of the SCC at the same instant. Together they would rush in with their phasers blazing and kill any Romulans who were still alive. It couldn't fail.

Byron waved toward the door when the countdown reached one minute. He stepped through and they all slipped out into the corridor, crouching low and keeping close to the door. The door closed softly behind them.

The corridor itself was devoid of any furnishings. And as they had no control over the lighting, they were fully illuminated and really had no place to hide. But it would only be for a minute. What could happen in one minute?

Then they heard footsteps. A Romulan patrol, perhaps? Byron waved to the others to crouch even lower. He could hear footfalls approaching the end of the corridor. Then a figure appeared— from their distance he couldn't tell...

Zam! Byron winced in pain as a Romulan disrupter shattered the wrist of his cannon holding hand. Reins rose up and shot at the lead Romulan with her blaster. Byron twisted his body to aim the cannon in the general direction of the corridor junction and fired. FOOM! Two Romulans were blasted back against the far wall— but two more came running towards them, disrupters blasting. Reins fired and hit one, but the other dove to the floor and fired, catching Reins in the abdomen; she doubled up and collapsed on the floor.

BOOOOOM! The door to the Supply Room was blasted open and debris from within flew into the hall. Dust clouded their end of the corridor.

“Into the SCC!” Byron shouted. He blasted out the lights in the little supply room, then signaled to Susan who grabbed Meryl's feet, pulling her inside the Supply Room. Byron cradled his cannon on the arm with the shattered wrist and stood just inside the door. Ward and Kline ran through the massive hole made by the blast, firing at anyone who moved.

Byron and Susan pulled Meryl to a far corner of the room, then knelt at her side to tend to her wounds. Byron leaned against the inside wall of the supply room, his eyes fixed on the shattered entry. A green ray zapped through the door; Byron waited. Another zap; then a hand appeared in the opening, and in it a Romulan disrupter. Still Byron waited. Another zap; and the profile of a Romulan face appeared in the opening. Still Byron waited. Two Romulans rushed in side-by-side, both of them blasting at anything. Byron rose up and fired once— FOOM! One of the Romulans was cut in two. The other ducked, then froze. Byron took aim and pressed the trigger— nothing! He looked at the power pack indicator— zero! The Romulan rose up, a fiery grin on his face. He held his disrupter at arm's length...

Zam! The Romulan fell forward with a spattering of green blood; there was a huge hole in his chest. At the rear of the little supply room Byron could just see Susan holding Meryl's Plarestan phaser rifle.

“Thank you Madam!” Byron said with a short bow.

“I'm afraid I can't do anything for Meryl,” Susan said, shaking her head.

Byron dropped his cannon and walked forward, holding out his arms. Susan collapsed into them and buried her face in his shoulder, sobbing deeply.

“You're wounded,” she said. “Your wrist... You need a medic.”

“There's more important things to worry about right now,” Byron said. He waved his good hand toward the opening. “Come. Let's see what remains of the SCC.” He led her through into a room littered with Romulan bodies and fragments of control equipment. On the far side of the room they could see another huge opening and through it the last of Lieutenant Jacobs' troops entering to help in the mop-up. Jacobs looked up and saw them stepping through the rubble.

“Smythe!” she shouted. She waved them over toward her and they stepped over many a dead Romulan to reach her position by the base command panel.

“I see you've got everything under control!” Byron said with a nod.

"I thought you might want to join me in reporting to Commander Firin!"

"Lieutenant!" shouted one of Jacobs' officers from a control station about 5 meters distant.

Jacobs wheeled around to look at him.

"They've released more gas!" he said. "Latitudes South 30 and 45, Sir!"

"Shut it down!" Jacobs shouted.

"I... I don't know..."

Byron reached over to the command panel with his good hand and touched a sequence of icons. The smoke-darkened vidscreen came alive with the image of the Latitude South 30 Promenade. A faint yellowish mist was descending from the ceiling. Byron touched a different sequence of icons and the mist ceased to emerge from the nozzles that covered the ceiling. Then he touched yet another sequence of icons and a faint pink mist began to emerge from the nozzles.

"What's that?" Jacobs asked.

"Neutralizer," Byron said. "It'll counteract the gas. But we still need to get medics out there immediately."

"We're on it!" Jacobs said. "Richards, open every turbolift on the base! Myers, shut down every force field the Romulans set up!"

"We'll need to cut off all lines of communication between the SCC and the Romulan ships," Byron said.

"Right," Jacobs said. "Winters?"

A rangy Ensign responded "Yes Sir!" and took over the communications console.

Jacobs touched a sequence of icons on the blackened panel and the image of Ensign Ronwold appeared on the screen.

"This is Lieutenant Jacobs! I need to speak to Commander Firin NOW!"

"I'm sorry, Lieutenant," the Ensign said with a touch of hauteur, "but the Commander is very busy now. Can I have him..."

"We've taken back the SCC Ensign!" Jacobs shouted. "Now PUT ME THROUGH!"

"Oh, yes, certainly Sir!" she said apologetically, and she switched them through. The Commander's haggard face snapped into view.

"Lieutenant!" he said with a steely glint in his eye.

"Sir! We have taken the SCC! The Romulans were taken completely by surprise. They released more anasticene, but thanks to Engineer Smythe here, we've neutralized it. We're shutting down the force fields..."

"Lieutenant!" Argov interrupted. "That's wonderful— you can give me your full report later. But tell me— you said you took them by surprise. Do you think they had time to warn their Commander, Vertosh?"

"No Sir!" Jacobs said. "One last Romulan struggled back to his feet and released the gas, for which offense he was killed immediately. But we don't think any others had time to inform the Romulan Commander."

“Very good Jacobs! Now here's what I want you to do...”

Chapter 28: Showdown

“Alright, Ensign, I'll speak to Vertosh now,” Argov said to Ronwold.

The screen flickered and the image of Vertosh appeared once again.

“Well, Commander,” he gloated. “Now you know that I am a man of my word!”

“Indeed I do,” Argov replied with a nod.

“Are you now ready to discuss the terms of your surrender?” Vertosh asked.

“And why would I do that, if I may ask?”

“Surely you now realize the hopelessness of your situation, Commander! Did you not see the terrible effect your anasticene gas had on your own crew?” Vertosh asked, his voice oozing hauteur.

“Oh, yes indeed I did,” Argov said. “And I'm afraid it has made me very upset.”

Vertosh furrowed his brow. “Upset.”

“Yes, terribly,” Argov lied.

“And... so are you now willing to discuss the terms of your surrender?”

“Oh, far from it, Commander. But I would be willing to entertain your plea for mercy.”

Vertosh guffawed, and the other Romulans on his bridge joined in.

“Mercy! Commander Firin, you astonish me! Why should I plea for mercy? I control the Security Command Center of your base— the very nerve center of your entire operation! And you are confined to the engineering department with no more than— what? Two hours of breathable air? By my count I have killed thousands of your crew whereas I haven't lost a single...”

Argov saw that one of Vertosh's aides had approached him and had whispered something in his ear. He touched a com icon on his command panel.

“Now, Lieutenant!” he whispered.

“What?!” Vertosh said with a look of alarm. “WHAT DO YOU MEAN THEY'RE NOT RESPONDING?” he yelled. More whispering. “THEN GET THEM!” The aide scurried out of view and Vertosh rubbed his palm across his brow.

“Is there a problem, Commander?” Argov asked with boundless aplomb.

Vertosh turned to face the viewer, then smiled broadly. “Just a minor communication problem, Commander. Nothing that will prevent me from extracting from you the information I require.”

Again an aide rushed up to him and whispered something unheard.

“THERE'S A WHAT??” Vertosh yelled.

“A force field!” the aide blurted.

Vertosh turned to face the view again and took just a moment to compose himself before speaking.

“One moment, if you please, Commander,” Vertosh said with a genial glow. Then the vidscreen went silent and dark.

A moment later the image of Lieutenant Jacobs appeared on Argov's vidscreen. “They're testing it now, Sir, just as you guessed.”

“Thank you Jacobs.”

After another few minutes the image of Vertosh reappeared, distorted by an almost comical smile.

“Commander Firin, what is the meaning of this... this... force field?”

“Just a security measure, Commander Vertosh.”

“Security measure! Commander, I'm warning you! I'll...”

“You'll *what*, Vertosh? Do you think you will be able to break through the force fields that we have established around every Romulan ship?”

“Actually...” Vertosh spluttered. “Uhh, did you say every Warbird?”

“Why don't you confirm that for yourself Commander?”

Vertosh gestured to one of his aides who busied himself with contacting the other Romulan vessels. After a few minutes he nodded to Vertosh who turned an ashen face toward the vidscreen.

“But... but how?” he gasped.

“So, Vertosh, I assume you are now convinced of the hopelessness of your situation. Unless you surrender *unconditionally* within the next hour, Vertosh, I will crush every Romulan ship!”

Vertosh looked about wildly to his aides for an explanation.

“But the gas!” Vertosh blurted.

“Oh, yes— the anastiscene gas,” Argov said. “The video you saw was a replay of your *second* gassing. Your murderous minions did in fact release the gas a third time as you commanded. But we were able to neutralize the gas before it could kill more than a dozen of our personnel. And we have either killed or captured all but a handful of the Romulans who were on board the base. Ensign...”

Ensign Ronwold switched the vidcam to a view of the SCC. She panned the camera to show the many Romulan bodies. Vertosh audibly gasped.

“Every Romulan on board this base who does not surrender will be killed. And if you do not surrender all Romulan vessels in one hour I will destroy every one. Oh, and I should inform you that the force fields of this base are powerful enough to contain a warp drive implosion.”

“Commander, I...” Vertosh looked about distractedly as if he expected to find an answer to his predicament drifting idly through the air.

“As for you, Commander,” Argov said, “I'm holding you personally responsible for the deaths of thousands of our base personnel. I expect your full cooperation, Commander. And I can assure you that I will do everything in my power to see that you pay for your crimes!” He turned off the vidscreen and rose from his chair.

“Ensign!” he called. “I want Myron Barker, Alicia Provanda, Brataachal

Virinachk, Elehan Targov, and Caralasham Orpilava in my office in 15 minutes!”

“Yes Sir!” Ensign Ronwold replied.

“I’m returning to my office now,” he said. “Contact me the minute we hear from either Vertosh or Starfleet.” And with that he left main engineering, turned down the hall and got into the turbolift.

Argov returned to Latitude North 75, turned down the short hall and entered his office. He sat in his self-adjusting chair, which immediately adjusted to a very comfortable and completely relaxing position. He wanted nothing more than to drift off quietly to sleep. But he couldn’t afford to sleep, especially not now. There was still the matter of Vertosh to settle. And Starfleet could contact them at any moment. He’d been surviving on catnaps and stimulants for the past four days. It was beginning to wear him down.

Chief Medical Officer Targov was the first to arrive.

“I need something to keep me going, Elehan,” Argov said.

The Doctor scanned the Commander with his medical recorder.

“You can’t keep doing this, Commander,” Elehan had told him. “You’re going to need to get some rest soon, or you will begin to hallucinate.”

“I can’t afford to rest now, Doctor,” Argov insisted.

“As Chief Medical Officer, I cannot comply with your request, Commander,” the Doctor said. “You need good honest rest. A stimulant isn’t the answer.”

“You’ll change your mind after the meeting,” Argov said. The others were just arriving. “Please sit down.” He gestured toward the chairs that circled his desk. They each took a seat, but Argov rose from his chair and paced back and forth before his desk.

“As you know, all of the Romulan vessels are enclosed in force fields. Vertosh has another 34 minutes to surrender unconditionally. I have summoned you here to help me decide what we should do if he does indeed surrender.”

“But he won’t!” Brataachal declared. “He’s too stubborn!”

“I wouldn’t be so sure of that,” Argov replied. “He’s stubborn, yes, but would he risk the lives of his crew?”

“What about himself?” Alicia asked. “Would he choose perhaps to spare his crew, but to destroy his own vessel with himself along with it?”

“And what if he were to do that just at the moment that we transfer his crew from his ship to our base?” Myron offered.

“Kablooie!” Alicia said, throwing her hands in the air.

The others looked at each other with the realization that they faced a difficult problem indeed.

“That is exactly the problem I have summoned you to help me solve!” Argov said. “We want to be prepared for any action Vertosh might take, however barbaric.”

“I would love to get my hands on one of those Warbirds!” Myron declared. “I’ll bet we could adapt their cloaking device to the base’s power systems in a

jiffy!"

"Not to mention the tactical advantage of having a Romulan military computer at our disposal!" Brataachal said.

"Oh, but the Romulans would secure everything before they left their ships, wouldn't they?" Alicia asked. "The weapons systems would be locked down, the cloaking device would be destroyed, all databases would be wiped clean..."

"That's exactly why the Warbirds are not important!" Argov declared. "I'm more concerned about the Romulans themselves."

"But Sir!" Myron pressed. "Just think of the advantages we would have if we were to get even one of those cloaking devices!"

"If Vertosh does surrender, the vessels themselves will simply become bargaining chips," Argov said. "We will negotiate with the Romulan High Command for the release of the ships and of the personnel. The ships will have more value as negotiable assets if they have not been compromised."

Alicia nodded. "And therefore we can't expect to retain any of the ships. But what of the Romulan crew?"

"They too will have more value in a negotiation if they are uninjured," Argov said. "Any abuse of their crewmen will be attributed by Romulan negotiators to the command of this base, regardless of how events actually play out. We have to do everything we can to ensure the safety of the crew."

"And that is why we can't allow Vertosh to destroy his own crew along with his vessel," Alicia deduced.

"Precisely!"

There was silence in the room while everyone absorbed these observations.

"What about Vertosh himself?" Elehan asked. "Will he just become a bargaining chip too?"

"We will treat every Romulan we take prisoner, regardless of rank, with the utmost propriety and decorum," Argov declared. "There will be no summary executions, no physical abuse, no insults. We must not give the Romulans any advantage in negotiations!"

"I see," Brataachal said. "And have you considered the fact that we don't have a brig large enough to hold all of the Romulans prisoner?"

"Yes, I have," Argov replied. "But we have lost several thousand of our own crew, so we have quarters available for at least that many. Engineering would have to secure any quarters that we use as prison cells, but I don't see that as a major problem."

Myron thought about that idea for a moment, then nodded in agreement.

"Why do we have to take the Romulans on board the base at all?" Alicia asked. "Why not just leave them on the Warbirds? Then their welfare isn't really our problem, is it? We don't have to worry about feeding them, we don't need to worry about keeping them secured. We don't run the risk that some of them might become ill, or that they might try to commit mass suicide..."

“True,” Argov replied with a nod. “But it is essential, in my view, that we remove them from their ships. It reinforces the finality of their surrender. And we’ll have more latitude in negotiation. We can treat the Warbirds separately from their crews. Besides, if we don’t remove the crews, we run the risk that they will just destroy the vessels at the moment that we release them to the Romulan High Command.”

“But don’t we run that risk anyway?” Brataachal asked. “Couldn’t they write a program that would wait for the moment that we remove the force field and then implode the warp drive?”

“Not if we shut down the warp drive first!” Myron said.

“Shut it down?” Brataachal exclaimed. “Won’t they lock the control systems to prevent us from doing exactly that?”

“We force the Romulans to disable the warp drive of each ship,” Myron declared. “Engineering will verify that the warp drive of each vessel has been taken offline before we allow any of the crew to disembark.”

“OK,” Argov acknowledged, “is that enough? Is there anything else that Vertosh could do that would jeopardize the base while we are in the process of transferring the crew?”

“Yes,” Alicia said, “there certainly is. They could overload the weapons systems. They could mask the warp drive signature to make it appear that it’s inactive when in fact it’s not. They might use their cloaking technology to conceal the warp drive altogether.”

Myron pursed his lips and crossed his arms over his robust chest. “Hmmm,” he mumbled with a scowl.

“I take it from your incoherent response, Myron” Argov continued, “that you concur with Alicia. If so, we still need to devise a foolproof means for transferring the Romulans while ensuring that Vertosh can’t endanger either the base or his crews.”

Alicia nodded, as did Brataachal and Elehan. Myron just grunted.

“Myron, I want to hear your best proposal in one hour,” Argov said. “Elehan, I want you to review all of our communications with Vertosh. I want your assessment as to his mental state. I want to know how best to interact with him when next we talk. Our goal must be to minimize the likelihood that he will do something rash. Questions?”

Argov looked around the room. All present shook their heads.

“Just one more thing,” Argov said. “Caralasham, I want you to put together a group of your top security people for the purpose of reviewing every aspect of our security policies. I want to know how we were able to lose the Security Command Center to just one disguised agent. I want to understand how Engineer Smythe was able to climb up through the base’s access shafts and blast his way into the SCC. We are going to have to change some security policies, and I want to be certain we are making the right changes. I want a full report in 36 hours. OK?”

Caralasham Orpilava nodded.

“Dismissed,” he said.

Elehan approached Argov as the others were leaving.

“You’ve convinced me,” Elehan said. He took out a hypospray and applied it to Argov’s neck. “Just promise me that you’ll get some real rest as soon as possible.”

“Thanks, Doc,” Argov said. “Believe me, there’s nothing I would like more right now than a good night’s rest.”

Elehan left the room and Argov settled once again into his chair. It was so comfortable that for a moment he thought he might just close his eyes... But there was still too much to do. He touched the com icon on his control panel.

“Ensign,” he said to his Duty Officer in the adjoining office, “get me Alliance Command!”

Chapter 29: Surrender

Argov called Brataachal Virinachk on the com. "I want all of the bodies recovered and stored," he ordered. "Even if we have to store them in an open hangar bay. Cleanup and reconstruction can wait."

"Yes Sir," Brataachal replied.

Argov was standing behind the main command panel in the Security Command Center. There was still some debris gathered in the corners and under some of the desks. Engineering crews were busy repairing the power conduits and command panels destroyed by the two blasts, but the two immense holes still discolored the walls with black explosive char like two horrendous wounds. Many of the desks, chairs, and command panels had been destroyed in the dual blasts, and crews were busy repairing any command panels that were useful to normal operations.

"Are we ready?" he asked into a discolored and slightly askew vidscreen.

"Yes sir!" replied Myron's image.

"Very good, let's begin." Argov touched a command button and after a few moments the image of Commander Vertosh appeared on another equally discolored vidscreen.

"Hello, Commander," Argov said with a cheery smile. "We are ready to begin transporting your personnel. I would like to begin with your ship, if you wouldn't mind."

"Perfect!" Vertosh agreed.

"As we have explained, you must shut down your warp drive before we can begin."

"Yes, we understand. And we have already done so."

In the other vidscreen the image of Myron nodded.

"My Chief Engineer will be monitoring your ship's energy signature, Commander," Argov warned. "If he suspects that you have powered up your warp drive, I will stop the transfer."

"I understand completely," Vertosh said, again with a broad smile.

"And we would like you to be among the first to disembark," Argov said.

"Oh, I really must stay aboard until the very last, Commander," Vertosh insisted. "We Romulans believe that it is always a Commander's responsibility to see to the safety of his crew!"

"As do we of the Alliance, Commander. Very well, you may be the last to disembark, if you so prefer."

"I do indeed," Vertosh said with a nod.

"My Chief Engineer will provide you with the coordinates to which you should transport your personnel," Argov said. Myron nodded again and pushed a com panel icon to transmit the coordinates.

"Myron, you may shift the force field now," Argov said.

In Main Engineering, Myron expanded the spherical force field that

encompassed Vertosh's vessel and shifted its center several dozens of meters so that it now enclosed a portion of the docking bay as well as the entire ship.

"And now you may begin your disembarkation," Argov said.

The Romulans beamed their personnel to the docking bay in groups of about twenty. It took more than an hour to transfer all of the nearly 600 crewmen on Vertosh's ship.

The Romulan crewmen were assembled in neat rows on the docking bay floor, surrounded by a number of armed Security Guards several meters away from the point of transfer. The Romulans had been asked to provide a roster for the crew of each ship, and Argov demanded that every Romulan soldier be accounted for before they could be taken to their quarters. Lieutenant Jacobs was in command of the operation.

"All present, Sir," Jacobs reported at last.

"Thank you Lieutenant," Argov replied. "Myron, how many life signs remain on board the Romulan ship?"

"Just one, Sir," came the Chief Engineer's reply.

"Commander," Argov said to Vertosh, "I have just received confirmation that all of your personnel are safely on our docking bay. You may now transfer yourself."

"It will just take me a moment, Commander," Vertosh said with his too-familiar smile. "There are a number of systems that I must shut down before I turn the ship over to you."

"I understand fully, Commander. We are ready to receive you as soon as you are ready."

Silently, discretely, Argov touched a command icon. Myron's image noticed a light on his command panel and nodded, then busily entered commands. He looked up and gave Argov a nod.

Argov could see that Vertosh was rapidly entering commands into his own panel. At last Vertosh rose.

"It will take me a few minutes to get down to the transporter room," Vertosh said. "I assume you will want me to transfer to the same coordinates as the others?"

Argov nodded. "Yes, Commander, we will."

Vertosh left the bridge. Argov touched an icon on his control panel and the vidscreen displayed an image of the docking bay. Argov could see the neat rows of Romulan crewmen and the Security Guards who surrounded them.

"Lieutenant Jacobs!" he called into the com.

"Yes Sir!," came her prompt reply.

"You may begin transferring the Romulans to their quarters at your leisure."

"Yes Sir."

"And Lieutenant," Argov continued, "make sure everyone is behind the yellow line."

“Absolutely Sir!” Jacobs replied.

Argov studied the image of the docking bay. There was a broad painted yellow arc just a few meters from the neat rows of Romulan crewmen and just a few meters beyond that was the position to which they had been transported. He could see that already about half of the Romulans had been shepherded into the Grand Promenade for berthing.

“Myron?” Argov asked.

“Yes Sir,” Myron replied. “It’s just as you suspected, Sir. Somehow he was able to mask the warp drive. I’m picking up a surge in energy that could only come from a warp engine.”

“Is everything secure?” Argov asked.

“Absolutely, Sir,” Myron said with a nod.

Commander Vertosh's form appeared on the docking bay. Once materialized, he looked about with an uncharacteristically puzzled expression and saw that there were no base personnel near him. He saw the others of his crew lined up just a few meters away and he began walking toward them— but was stunned to find himself separated from them by a very powerful energy field.

“Commander!” Vertosh said into his communications device. “What is the meaning of this? Why have you separated me from my crew with this... this...”

“Shield,” Argov completed for him. “It’s just a security precaution, Commander. There’s really nothing to worry about.” Argov could see in his vidscreen that the last of the Romulan crewmen were being escorted out of the docking bay into the Grand Promenade.

“Precaution, Commander?” Vertosh said with evident bewilderment. “Why should you need to take precautions? And what have you done with my crew?”

“Your crewmen have been taken to their quarters, Commander,” Argov answered, “just as we promised. Lieutenant?”

“Yes Sir,” Jacobs replied. “We’re all done here, Sir!”

“Very good, Lieutenant,” Argov said. “Make sure all of your people are behind the blue line.” In his vidscreen, Argov could see the broad blue arc just a few meters beyond the yellow arc.

“We’re clear, Sir,” Jacobs said.

“Thank you, Lieutenant,” Argov said. “Myron, we’re ready. Raise the outer shield.”

“Yes Sir!” Myron said. Argov watched as he touched a few command icons and then nodded. “All set!” he said.

“Commander,” Argov said to Vertosh. “We’ve got two shields around your ship. The inner shield falls along that yellow line on the docking bay floor. The outer shield falls along the blue line. When I give the word to my Chief Engineer, he will raise the inner shield. At that time I would like you to cross the yellow line...”

“But Commander,” Vertosh interjected, “I must protest!”

“Are you ready, Chief Engineer?”

“Yes Sir!”

“But Commander Firin!” Vertosh objected.

“You may now raise the inner shield!” Argov announced.

Myron nodded and entered a command. In the vidscreen Argov could see the inner energy field snap off— and in an instant there was a tremendous explosion that ripped apart the Romulan ship and the portion of the docking bay that was inside the yellow line— including the portion on which Vertosh was standing.

“Just as you suspected, Commander,” Myron said. “He had his ship rigged explode the moment the shields were raised. But it looks like the damage was fully contained.”

“Jacobs?” Argov asked.

“Yes Sir,” the Lieutenant said. “Everything is fine here!”

“Very good, Lieutenant. Ensign! Get me the captains of the remaining Romulan ships!”

The images of the remaining five Romulan captains appeared on the vidscreen that formerly featured the image of Lieutenant Jacobs.

“Captains!” Argov said. “I hope you have all watched our transmission of the tragic events that resulted in Commander Vertosh's death. This incident was entirely preventable. The Commander's intent was to damage this base by destroying his ship the moment we shut down the shields containing his vessel to remove his crew from the docking bay. He was willing to sacrifice himself and his entire crew to inflict damage to this base. I hope that all of you now see the futility of his plan— and that none of you will repeat his mistake. And we sincerely hope that none of you plan to sacrifice the lives of your crewmen. But be assured that I am not going to allow any of you to damage this base. You have my personal assurance that we will not compromise your vessels in any way. If you need additional time to secure your vital systems, please take it. Our only interest is in the safety of your crews and of this base.”

After a lengthy reflective pause, the Captains each sullenly, silently, nodded.

Argov personally oversaw the disembarkation of the remaining five Romulan ships. There were no further incidents— but it was a lengthy and tedious process. In the final hour, Argov could feel the stimulant that Dr. Targov had given him wearing off. But he remained at his command post until the last Romulan Captain had been safely berthed.

“Excellent work, Myron!” Argov said when the last Romulan was locked in quarters. “Everyone in Engineering is to be congratulated for a job well done! Now I want you to get some rest!”

“Oh, I don't know that I can do that, Sir,” Myron objected. “There's still a lot of cleanup work to be done...”

“It can wait, Myron!” Argov said. “I'm going to need you the minute Starfleet contacts us again.”

“Yes Sir! Thank you, Sir!” Barker said.

“Jacobs?”

“Yes Sir,” came the Lieutenant's voice.

“Thank you for a smooth operation. And now I want you and your crew to get some much deserved rest as well.”

“Yes Sir, thank you Sir!” Jacobs said.

“Ensign!” Argov said into his com panel.

“Yes Sir!” came the voice of Officer Richards, the current Duty Officer.

“I'm going to return to my quarters to get some rest. But I want you to wake me the moment we hear from Starfleet.”

“Very good Sir!”

Chapter 30: Negotiation

Varn led them down a long hall of many turns to a small, darkened room. Melissa was sobbing uncontrollably; but Dorain stared at their captor with grim resolution. He signaled the guard to chain their hands to the wall.

“For your futile attempt to escape, Argov,” Varn said with a haughty sneer, “you and your Alliance comrades will all be sent to the mines!” He paused a moment to let the terror of that punishment chill their thoughts. “But first I have decided to reward my most loyal guards with a bit of pleasure!” He laughed coldly as a dozen brutes shouldered their way into the small room and grabbed lecherously at their loins...

“Commander!” came a disembodied voice. Argov struggled for a moment to understand why Varn would call him Commander. He wrestled himself away from Varn’s repellent image and realized that he was in his own quarters.

“Commander, Starfleet has contacted us!” came an unfamiliar female voice.

Argov sat upright, then realized he had just awakened. “Ah yes, the Duty Officer. Yes, yes, thank you— I’m on my way!”

“Commander!” the Duty Officer replied. “Starfleet has requested that we forward their communication to your quarters. They say it is too urgent to wait.”

“Oh, yes certainly. And get Chief Engineer Barker on the line as well.” He strode into his sitting room and touched the vidscreen. The image of Professor Mair appeared, looking even more weary than before.

“Good day, Professor! Hope you’re doing well.”

“Spare me the pleasantries, Commander Firin,” Haywood said. “I and my staff have been living on stimulants for the past week.”

Argov stiffened and adopted a look of stern professionalism. “What can I do for you, Sir?”

“Starfleet has studied the mathematics provided by the Valenciara and they believe that they now understand how the aliens are able to destroy stars.”

Just then the smiling image of Myron filled the left hand side of the vidscreen.

“What have I missed?” Myron asked.

“Professor Mair of Starfleet has just reported that he has learned how the aliens are able to destroy an entire star,” Argov said.

“Not I,” Haywood said, “but Professor Ochohanno and his staff, who have labored heroically to study and understand what is without doubt the most complicated mathematics we have ever seen.”

“And?” Myron asked.

“We now realize that there is a differential between our universe and that of the aliens,” Haywood explained. “This differential is such that they are able to send particles which in their universe have very low mass that correspond to extremely heavy dark matter particles in our universe— and the energy required

to do that is actually quite low. So they can effect an immensely devastating result with a very small expenditure of energy.”

Argov nodded. “Yes, that makes sense.”

“And how does that help us?” Myron asked.

“The Valenciara have shown us how we can use the same method to strike back,” Haywood said with what appeared to resemble a smile.

“Really! What do we need to do?”

“Our research indicates that it will require a coordinated attack,” Haywood said. “We have determined that we will need to use two of the Subspace Tunneling Transporters to accomplish our objective.”

“But I thought that the Transporters are too inaccurate to use for transporting much of anything!” Argov objected.

“The inaccuracies of the Tunneling Transporters is only due to the imperceptibly small vibrations in the base,” Myron said.

“Precisely!” Haywood agreed. “The Tunneling Transporters are the most accurate ever designed by the Federation. But their accuracy is ameliorated by the very slight wobble in the base itself that is induced by the pulsar’s precession. The base’s stabilizers can counteract all but about one millionth of a percent of that wobble.”

“So doesn’t that mean that we won’t be able to direct the Transporter to its target with sufficient accuracy?” Argov asked.

“For our present purposes,” Haywood replied, “no. The wobble won’t prevent us from attacking the Aliens— so long as the stabilizers are working properly. There will certainly be some distortion in the delivery of our payload, but it won’t matter so long as the distortion is very small.

“When we tested the transporter the material was transported, but with obvious distortion— too much distortion to be useful for this purpose. So our first order of business will be to conduct the same test with *your* base, Commander. We would expect some distortion, but it must be extremely small.”

“So what are we sending?” Myron asked.

“Our scientists have proposed using two cylinders, each about half a meter in diameter, one containing neutrinos, and the other containing anti-neutrinos.”

“Wow,” Myron said with a sneer, “that’ll really do some damage. We may as well hit them with a ton of feathers!”

“You’re forgetting the differential between our universe and theirs,” Haywood replied. “The mathematics provided for us by the Valenciara have enabled us to determine the exact nature of that differential. And when we work out the mathematics, we find that the two cylinders of neutrinos and anti-neutrinos will have greater power in their universe than would two cylinders each a million times larger packed with protons and anti-protons would in our own universe!”

“Annihilation!” Argov said. “So you want us to transport a cylinder of neutrinos to the same coordinates to which you will transport a cylinder of anti-

neutrinos.”

“Yes, that's it exactly! The neutrinos and the anti-neutrinos will collide with such a devastating force that we believe it will eliminate the alien source.”

“OK,” Argov said, “that sounds hopeful. But how do we target something in another universe? I thought the Transporters were only designed to operate in our universe.”

“Yes, that's true,” Haywood said. “The Transporters were not designed to transport objects of any sort to other universes. Fortunately for our purpose, the Valencriara provided us with a mathematical framework within which we could design a solution to that problem. It took hundreds of people and computer simulations for us to come up with a solution. But we now have one. We have detailed plans which I am prepared to send to you that will show you the modifications necessary to enable your Transporter to target the aliens. We estimate it will take about 500 person hours to complete the work.”

Myron rubbed his chin. “OK, so if we make these modifications, do we lose the ability to transport within our own galaxy?”

“Temporarily, yes,” Haywood affirmed. “Because we had to rush to a solution, we weren't able to come up with a design that would enable us to transport within our own galaxy without reversing the modifications.”

“When do we get started?” Argov asked. “And when do we expect to be able to launch our attack?”

“We have about three days in which to complete the modifications,” Haywood announced.

“Three days!” Myron said with a gasp. “How am I going to cram 500 hours of work into three days? In case you don't realize it, we're short on personnel here!”

“I don't know *how* you're going to do it,” Haywood retorted. “I only know that you'd better manage it somehow. 500 hours is seven people working for three days straight. We have been analyzing the pattern of their attack. The stars they have been attacking fall along a broad arc that cuts right through the planetary system of Goridon. We estimate that in another three or four days, Goridon's star will be under attack.”

For a moment Argov was silent as he struggled to grasp the implications of this revelation. “Then we'd better get started immediately! Do we need any special equipment?”

“Yes. We are manufacturing a new component now that will be necessary for our solution.”

“Can you make two of them and transport one to us?” Argov asked.

“Unfortunately, no,” Haywood said. “The slight distortions due to the star's precession would be enough to render the device useless. The best we can do is to transmit the plans to you digitally. You'll just have to fabricate your own device.”

“I see,” Myron said. “What equipment will we need? Our Engineering Department is designed for operations, not fabrication.”

"We know," Haywood said. "Both bases have much the same design. The procedures we have developed are designed to work with the equipment you have on hand."

"How will we know if we have been successful?" Argov asked.

"We'll know almost immediately," Haywood replied. "The attack on the suns they are presently targeting should abruptly cease. It's the one thing we can directly observe."

"Then send us the plans immediately, and Myron and I will meet as soon as possible to figure out how we can make a three day schedule."

"Very good," Haywood said. "We'll send the plans now."

"Thank you, Professor!" Argov said. Haywood nodded and mustered a weak smile; then his image snapped off.

"Ensign!" Argov barked. "Please assist the Professor by providing whatever he requires! Myron! I want you in my office in one hour to discuss how we are going to get this done in LESS than three days!"

"Yes Sir!" replied the Ensign.

"Yes Sir!" Myron said.

Argov dressed, got a quick breakfast, and headed down the hall to his office. There were sentries stationed in the reception room, in the hall, and either side of his office door. Once in his self-adjusting chair, he contacted the Duty Officer.

"Have we heard anything from the Romulans yet?" Argov asked.

"Yes Sir," the young Ensign replied. "The Romulan Ambassador contacted us a little more than three hours ago, Sir."

"Then why didn't you wake me!" Argov yelled.

"Sir... I..." the Ensign stammered. "Dr. Targov said you needed your rest, Sir!"

"Dr. Targov," Argov said with disgust. "I see. Very well, Ensign, if the Ambassador is within subspace radio range, get him on the line. What is his name?"

"*Her* name, Sir," the Ensign corrected. "Ruilia Valpraact. And Sir, because you were asleep I directed her to Alliance Headquarters. Sir."

"Oh, you did!" Argov said with surprise. "And what did Headquarters say to her?"

"They said that she would have to talk to you, Sir," the Ensign replied.

"Well, that at least is true," Argov agreed.

"And she is aboard a ship just 5 million kilometers from here."

"Then get her on the line for me, and contact Admiral Triminol too. Let the Admiral know that I will be speaking with the Romulan Ambassador shortly about our Romulan guests. Also let her know that I just spoke with Professor Ochohanno and that I will follow up with a report to her shortly. And make sure that you record my conversation with the Ambassador for transmission to the Admiral. But get me every bit of information we have about Ambassador

Valpraact *first.*”

“Yes Sir!”

When the Ambassador’s resume on his vidscreen, Argov scanned it quickly. Valpraact was the granddaughter of an Admiral Brilviralc who fought brilliantly in the Dominion war. He was renowned throughout the quadrant for his heroic attack on a Dominion base in which, with a single Warbird and five shuttlecraft, he was able to destroy the base and capture more than fifty Jem Hadar.

Just a few months later Admiral Brilviralc was killed in the Dominion attack on Romulus in which virtually the entire Romulan fleet was destroyed. As the Dominion fleet was preparing its attack on Romulus, the Admiral obtained passage for his wife on board a cloaked cargo ship.

Ruilia's father, Liralach, was born aboard that cargo ship. He was a pilot by the age of 15. He was appointed head of the College Of The Fleet by the time he was 30 and was credited with rebuilding it to the high standards that had made the College every bit the equal of Starfleet Academy.

Ruilia was born in the first colony founded by the Romulans in the new region of space they were to call home. She may have been born to a family of power and influence, but her achievements were entirely her own. She graduated from the College Of The Fleet at the top of her class. She made major contributions to Romulan weapons technology while still a student. She served with distinction as a Warbird captain for more than a decade. She spent five years in the reconstituted Tal Shiar, the Romulan secret police. And she was widely respected in both the military and civilian branches of Romulan government.

“Commander!” the Ensign said. “I have the Ambassador for you now, Sir!”

“Put her through,” Argov said.

In a moment the image of a beautiful but steely woman filled one side of the vidscreen.

“Greetings Ambassador,” Argov said. “I'm sorry I was unable to speak to you earlier. I was... detained.”

“You were SLEEPING!” the Ambassador exclaimed. “You decided that it is more important to SLEEP than it is to speak to me!”

“Yes, Ambassador,” Argov agreed, “I did. Your vassal Vertosh did everything he could to destroy my base, to terrorize my crew, to force me to capitulate. He killed several thousand of my crewmen and destroyed two of our loading docks, and he was even prepared to sacrifice the lives of his entire crew! Many of my crewmen had no more than a few fitful catnaps for the five days that he was in control of my base. As for myself, I took stimulants throughout the entire ordeal and really had no sleep at all. So yes, Ambassador, I did think that sleep was more important than talking to you.”

The Ambassador opened her mouth to speak, but Argov continued.

“Madam Ambassador, we have a very serious matter to which I must attend. I am certainly willing to talk about the release of the five Romulan

warbirds we have in our docking bays and the 3,531 Romulan crewmen we have in custody, but if your only interest is in schooling me in the proprieties of interplanetary protocol, then I will have to ask you to wait while I attend to matters that are far more urgent.”

“You have NO RIGHT, young man, to speak to me that way! We will get to the matter of the release of our ships, which you are unlawfully holding, AFTER you have acknowledged that you have violated protocol.”

“Commander Vertosh violated every known protocol and propriety, Madam Ambassador, when he used a flotilla of cloaked warships and a spy to gain control of our base. No one in the Alliance had any idea that Romulans had taken up habitation in this region of space. So until you are willing to admit that your very first contact with the Alliance was devious and openly hostile, I'm afraid we have no grounds for continued negotiations.”

“Commander Vertosh was a renegade!” the Ambassador retorted. “His actions were not sanctioned by the High Command. He acted alone. And since he has already paid for his crime with his life, you really have no cause to detain our citizens. I demand their immediate release from this unwarranted imprisonment!”

“He came with a flotilla of six ships, not just one, Madam Ambassador!” Argov said. “Perhaps you were not aware that this operation was made possible by the infiltration of a Romulan spy into the ranks of the Alliance. He was surgically disguised to look like a Klingon. I looked into his biography. He enrolled at the Alliance Academy— as a Klingon— more than ten years ago! You can't expect me to believe that Vertosh would have been allowed to coordinate his attack with the spy's actions without the knowledge and direction of the High Command! It would have been pointless for Vertosh to reveal his position until he knew that our base had been commandeered by the Romulan spy!”

“Commander, I warn you— your words are irresponsible and insulting! It is obvious to me that you have no interest in conducting serious negotiations. So I am afraid that I will be forced to take up this matter with your superiors. And you can be certain, Commander, that I will make them *fully* aware of your disrespectful attitude and your outrageous allegations!”

“By all means, Ambassador, please contact the Alliance leadership if you think you can get further with them. Oh, but you already did that, didn't you? And they referred you to me, did they not?” He paused a moment to let that thought sink in. “Since Commander Vertosh had the foresight to free up almost 10,000 of our crew quarters, it is now no burden to us to keep your ships and your crewmen locked up for as long as necessary. Now if you will excuse me, Madam, I have other urgent matters to consider.”

Argov touched a command icon on the vidscreen and the Ambassador's image flicked off.

“Commander!” came the voice of the Duty Officer over the com, “Engineer Barker is here to meet with you!”

“Show him in, Ensign,” Argov said.

Barker entered the Commander's office and sat in one of the chairs at the

conference table. Argov's office was sparsely decorated— he had added only his self-adjusting chair and a single small photo.

“Who are they?” Barker asked. “The people in that photo on your desk.”

Argov grimaced. “My parents. I look at that picture every day, and every day it makes me cry.”

Myron winced. “I didn’t mean to cause you discomfort, Sir.”

Argov rubbed his forehead, then shook his head. “Don’t worry about it.”

“Anyway,” Myron continued, “I’ve looked over the plans, and I just don’t see any way that we can squeeze 500 person hours of work into three days. They want us to practically rebuild the entire transporter with parts that have never been manufactured or tested! It just can’t be done!”

“You know what will likely happen to Goridon if we don’t succeed.”

“I know, Sir,” Myron said. “But I’m short on personnel. We lost more than half of the Engineering crew to the anastiscene gas. Both Tricia Rodgers and Walaral Poralagol were victims of that barbarian Vertosh. They were the very best that the Alliance had in the area of subspace tunneling technology, and they each had two years of training on this technology!”

“Can I reassign people from another department?”

“I don’t think so, Sir,” Myron replied. “I’ve lost two of the ablest and most resourceful engineers in the Alliance. I need people with first rate skills. It won’t do to recruit security guards or waiters or gardeners. I need engineers!”

“May I suggest that you talk to Byron Smythe?” Argov ventured. “He was second in his class at the Alliance Academy.”

“Smythe? Isn’t he the one who masterminded the retaking of the SCC?”

“Yes, that’s right.”

“Why haven’t I seen him in Engineering before?”

“Because his security clearance is only Level 7,” Argov replied. “His Level 8 application is still being considered at Alliance Command. But I have the authority to grant him a temporary Level 8. All I need is your personal request for his assistance.”

“Absolutely! But he won’t understand the technology of the subspace transporter. I spent more than two years in training myself! So I just wonder how useful he will be.”

“You might find that he’s more resourceful than you expect,” Argov said. “Besides, he’s been reading training documents on the transporter for the last several days!”

“Ooooh, I see! So you already gave him Level 8!”

“Will that help?” Argov pressed. “Can you work him into your schedule and get the work done in three days?”

Myron scowled and stroked his chin. “Perhaps. But only if he can hit the ground running.”

“In any case, Myron, you have to make this work. We really don’t have any other option. If there is anything I can do— if there is any additional resource

I can divert to Engineering that will help— just ask for it. You have my full support. I will transfer any number of personnel to your department. I will bend or break any rules necessary to get this job done. I am fully at your disposal. This is absolutely the single most important job we have.”

Myron thumped his chair and rose. “Yes Sir! I won't let you down!”

“I will have Dr. Targov pay a visit to Engineering to provide everyone with a stimulant that will get you through the next three days without the need for sleep. And one more thing. I want a report every eight hours. I want to know what's working and what's not. And I want to know immediately if there is anything that is proving to be an obstacle. Understood?”

“Absolutely, Sir!” And with that Myron turned on his heels and strode out.

Argov sat again in his self-adjusting chair and touched the vidscreen. The solemn face of his Duty Officer appeared.

“Engineer Barker is returning to his post,” Argov said. “See to it that he gets anything he asks for. If he needs to talk to me, put him through immediately.”

“Yes Sir!”

“As for the Romulan Ambassador, I expect her to ask for me fairly soon. I want you to tell her that I am unavailable each of the next three times she tries to contact me. But put her through on the fourth time. Do you understand?”

“Yes Sir,” the Duty Officer said with a smirk. “The fourth time, Sir. Absolutely!”

Chapter 31: Return of the Rim Quest

"We're making progress," Myron said in his first report, "but... I just don't know, Sir. I'm just not sure if we can finish this job on time."

"What about Byron Smythe?" Argov asked. "Has he proved to be helpful or not?"

"Oh, yes Sir, he's very smart and very committed. I don't know how he did it, but he has somehow acquired an excellent understanding of subspace tunneling technology in an incredibly short time."

"How's the fabrication of the new parts going?"

Myron nodded. "Not bad. They sent us plans that just went right into our industrial replicator. So the parts are ready, but we won't know if they're going to work until we are able to run some integration tests. And we're not ready for that yet."

"Is there anything you need from me?" Argov asked.

"More time," Myron said with a half smile.

"I wish I could give you a year. Keep at it!"

"We will, Sir," Myron said. "We haven't given up yet!"

After a bit of lunch he met Caralasham Orpilava to discuss base security.

"We have three recommendations," Caralasham said. "First, we must change the policies that enabled Vertosh to gain control of the SCC. The Base Commander Compromised scenario must be revised."

"But isn't it necessary, in some form? It is certainly possible, is it not, that the base commander could become compromised?"

"Yes, it is," Caralasham agreed. "But by giving full control of the SCC to the Romulans we effectively made it possible for them to control the entire base."

"So to whom would you give control of the SCC in this scenario?"

"No one," Caralasham said.

"No one!" Argov exclaimed. "Do you mean that you would disable the entire SCC?"

"Correct. If it is disabled, then no one has control of it. And without control of the SCC, it would be impossible to release the gas, to spy on the crew, or to erect shields for the purpose of restricting mobility."

"Ingenious," Argov said with a comprehending nod. "What about Engineering? We had control of the shields around Engineering. What if an enemy were somehow to take control? Couldn't they raise proximity shields around Engineering and sabotage the generators?"

"Yes, that is exactly right. So our second recommendation is that the ability to shut down the shield generators be disabled."

"But how is that possible?" Argov asked. "Wouldn't it still be possible to destroy the generators?"

"Not if a force field is raised around them first," Caralasham countered.

"I see! So your suggestion is that the base's primary systems be

protected with internal shields that no one has the authority to remove!”

“Not until the Base Commander Compromised scenario has been resolved.”

“Clever,” Argov said. “So what is your third recommendation?”

Just then the Duty Officer broke in over the com.

“Sir, it's the Romulan Ambassador,” he said. “This is her fourth call.”

“Thank you, I'll take it in here. We'll continue this later, Caralasham. May I ask you to wait outside?”

“Certainly, Sir.” Caralasham bowed and went out the door. Argov switched on his vidscreen and saw once again the agitated face of Ambassador Valpraact.

“Greetings Ambassador! How are you!”

“Once again, Commander, you have been ignoring me.”

“Oh, I am far from ignoring you, Ambassador,” Argov replied. “You have ever been in my thoughts. But we have been extremely busy. As you are no doubt aware, this is a research facility. And we are nearing the deadline for a very important experiment. So I am sorry that I have been unavailable, but we are on a very tight schedule.”

“Commander, I do not appreciate being patronized,” she sneered.

“Madam Ambassador, we have five Romulan warbirds in our possession. We have 3,531 Romulan crewmen in custody. If you ever want them to return to Romulan space you will negotiate with me in earnest. I'm not interested in discussing your feelings. I am much more interested in what you are going to do to make restitution for the thousands of my crew that your Commander Vertosh killed.”

“Commander!” the Ambassador objected, “it is perfectly evident to me that you have no understanding of diplomatic protocol.”

“That I will grant you, Ambassador, but at the moment I don't really have time for diplomatic niceties. We have very urgent work here to which I must attend.”

“And how, exactly, can research experiments be considered urgent?”

“Perhaps, Madam Ambassador, if our first contact with Romulans in this region had been genial and mutually cooperative, rather than brazenly hostile and aggressive, I might be at liberty to divulge that information to you. But under the present circumstances I simply cannot tell you.”

The Ambassador pursed her lips and studied Argov's face for some time. Argov was sitting at his desk, leaning forward, his hands resting on the desktop. She appeared for a moment to want to speak, but thought better of it and said nothing.

“I have three demands,” Argov continued. “First, the Romulan High Command must surrender at least one of their number to the Alliance to stand trial for this terrible atrocity.” The Ambassador scowled. “Second, the Romulan High Command must read a statement which I will write on the Alliance General Broadcast channel. The statement must take full responsibility for the incident

and must express sincere regret. And third, the Romulan High Command must openly acknowledge and respect the boundaries of Alliance Space as defined in the Alliance Charter.”

The Ambassador looked at Argov with an expression of disgust, as if she had just swallowed a mouthful of excrement.

“You must be mad! The High Command will never consent to this! I would be summarily executed for even asking them to entertain it!”

“Fine,” Argov said, “we have sufficient resources here to keep your personnel in confinement indefinitely. As for your warbirds, I will simply turn them over to the Alliance Intelligence Ministry to extract every bit of Romulan technology possible. Thank you, Ambassador— you have greatly simplified things for me.” Argov rose from his seat and moved to turn off the vidscreen.

“Commander Firin!!” she exclaimed.

Argov paused.

“Yes, Madam Ambassador?”

“I have a few demands of my own,” she said.

“I’m listening,” Argov replied with a smile.

“I want proof that our crewmen have been treated properly.”

“Certainly,” Argov said. “Would it suffice to provide you with direct vidscreen access to every Romulan we are holding captive?”

“Yes, that would be fine,” the Ambassador said with a nod. “But I also want proof that you have not tampered with our warbirds!”

“Very well, what if I allow you to pick a five personnel from the Romulans we are holding captive to inspect the ships— under armed supervision, of course.”

“Yes, that would do nicely.” There was a long pause as the Ambassador bit her lip with a look of intense consternation. “Let me present this to the High Command. I cannot guarantee that they will agree...”

“I understand,” Argov said with a smile. “For my part, if the High Command demonstrates a cooperative spirit, I give you my word that I will do my best to convince the Alliance that the person surrendered for trial should serve a commuted sentence.”

The Ambassador studied his face. “That is most generous of you, Commander.”

“I realize that I have put you in a difficult position Madam Ambassador. Just remind the High Command of the consequences if they decline, and I’m sure they’ll agree.”

“Very well, Commander,” she said with a solemn nod. “I will contact you as soon as I have a reply.”

“Thank you, Madam— I greatly appreciate your efforts.” He tapped the vidscreen and the image of the Ambassador was replaced with that of his Duty Officer.

“The next time the Ambassador calls, put her through immediately,” Argov said.

“Yes Sir!” he acknowledged.

“Now send Ms. Orpilava in.”

“Right away Sir.”

Moments later Caralasham Orpilava entered.

“Thank you for waiting. I thought we could continue our conversation about your recommended changes to our security policies. You were about to tell me your third proposal.”

“Yes, Sir. The key to making the Base Commander Compromised scenario work is to allow it to be resolved without wrongly giving control to an adversary.”

Argov nodded. “Yes, that’s clear.”

“The problem is that the entire chain of command can be compromised as well.”

“True.”

“In that scenario the computer would lock everyone out and there would be no way for anyone to regain control. Ever!”

Argov wrinkled his brow. “Really?”

Caralasham nodded. “So we’re recommending that not only must the entire chain of command be kept up to date, but the computer must also have authentication commands for the Alliance leadership.”

“That makes perfect sense. Do you have all this written up as a formal proposal?”

“No, Sir, we do not. Our feeling was that I should present our ideas to you first to get your feedback.”

“Well, what you’ve described sounds quite satisfactory. So write it up and give it to me and I’ll make sure it gets presented to Alliance Command.”

“Yes, Sir, thank you Sir.”

“Now, we need to discuss how we are going to provide vidscreen access to our Romulan guests.”

“It won’t be a problem, Sir. We have already set up the access point. And we’re working on configuring the security now.”

“Yes, that was my chief concern,” Argov said. “We don’t want a clever Romulan network engineer hacking into our communications system and retaking control of the SCC!”

“Yes, that would be bad. Fortunately the engineers who designed the base somewhat over-designed the network. It’s almost as if they anticipated our present need. The staff residences are on a separate network from the engineering and control systems. So even if a Romulan network whiz were to break into it somehow the most he would be able to do is disrupt communications.”

“Aah, that’s reassuring!”

“But we’re adding an additional layer of security. We’re giving the prisoners com badges.”

“Com badges! Doesn’t that mean that they’ll all be able to contact anyone on the ship?”

“No, they won’t. They’re getting special com badges that identify them as prisoners. Without their badges they won’t be able to use the vidscreen or request food from the replicator. But their badges will also prevent them from contacting anyone on the ship who is not a prisoner.”

“Great. Thank you, Caralasham-- you’ve eased my mind. Well, I won’t keep you any longer. You may go.”

“Thank you, Sir.” She bowed again and left.

Next he contacted Lieutenant Brooks, the officer in charge of collecting and identifying the bodies of the base's crewmen for disposal. On identification, each body was placed in a sealed body bag in one of the base's cargo bays.

“We're nearly done, Sir.” Brooks said. “We just have longitude 60 to 150 of Latitude North 60 to search. I think we'll be done within the next 10 or 12 hours.”

“Have you had any difficulties with identification?”

“Many, Sir,” the Lieutenant replied. “As you know, some of our people were simply blown out into space when Vertosh's ship attacked. We have a list of personnel who we believe were among those who were lost, but we won't know for sure until we complete the search of the base. Some bodies have been so badly damaged by Romulan phaser blasts that they could only be identified by DNA.”

“What is your current count?”

“We have 8,453 Alliance bodies in the cargo bay, Sir,” the Lieutenant said somberly. “And there’s an additional 437 Romulan bodies. We think 24 crewmen who were blown out into space. We don't think we'll find more than a couple hundred bodies in the portion of the base that we have yet to search, but we have been surprised before.”

“Very good, Brooks,” Argov said. “Let my Duty Officer know as soon as you have finished.”

“Certainly, Sir!”

For the next several hours Argov occupied himself with the usual duties of a base commander— attending to supplies, system reports, base operations. With so much of the crew decimated he had to focus all effort on operations and security. The Romulan captives were each locked in a crewman's quarters, so it should be impossible for any of them to escape— but it was still essential that each room be continuously monitored for tampering. He also had to consider the possibility that some of his own crew might attempt to seek revenge against the Romulans. He canceled all leave, ordered all personnel to work double shifts, and posted a crew of security officers along every corridor where Romulans were held. And he even ordered that the crops in the Agricultural Level be left unattended until he could free enough personnel to look after them.

In Myron's next two reports he said they were making steady progress and had encountered no significant obstacles. They had had to fabricate new parts

to rebuild the Transporter's entire control system. Starfleet supplied new software, most of it written hastily and untested— but installation had proceeded without a hitch. At last Myron called in his fourth report.

“We're ready to begin our first system test,” Myron said. “Do you want to be present?”

“No, unfortunately I have duties here that require my continued attention. Of course, I want to know the results, but I won't be able to observe. When will you begin?”

“Immediately, Sir, unless you have some reason for us to delay.”

“None whatsoever, Myron— just keep me apprised of your progress.”

An hour after that conversation, Argov received a call from Ambassador Valpraact.

“Yes, Madam Ambassador,” Argov said with a smile, “how may I help you?”

“I have spoken to the High Command. They are willing to accept your terms on the condition that you reveal the secret purpose of your base.”

“I have already told you, Madam Ambassador, that this base is devoted to scientific research.”

“Commander Vertosh said that it is a weapon!”

“Then it would be a singularly useless weapon, Madam Ambassador. This base derives all of its power from the pulsar that it orbits. It has thrusters that we use to stabilize its orbit, but we have neither impulse drives nor warp drive. It cannot leave orbit and is therefore fixed in this position. Our weapons are powerful, yes, but they cannot move!”

The Ambassador scowled, but said nothing.

“The Alliance will be much more willing to share information with you and the High Command— once your application for membership in the Alliance has been accepted by the Alliance Common Council.”

“Oh, come now Commander!” the Ambassador objected. “You and I both know that will never happen— not after this incident!”

“I think that I can get the Council to agree to consider your application fairly *if* you meet our other conditions and are cooperative over the next two standard years. If I am able to get agreement on this point in, say, 10 or 20 hours, would you be able to arrange for the signing of a treaty?”

The Ambassador tapped her finger on her desktop and pondered this offer for some time. “Perhaps, Commander. Perhaps.”

“Very well, I will attend to this immediately. As a sign of good faith, I have arranged for your people to have access to the Romulans in our custody. They can all be reached through this central access channel.” Argov touched an icon on his command panel and the access channel link appeared on the vidscreen. “At that access link you will find a roster of all of the Romulans we have in our custody, with an access link for each. We are also keeping the bodies of all Romulans who were killed in the attack in a docking bay. We can provide a means for you to inspect and identify the bodies, if that would be of interest to

you.”

The Ambassador made note of the access link. “Thank you, Commander, that would be much appreciated.”

Argov touched the vidscreen to disconnect from the Ambassador, then began another status report for Admiral Triminol.

“Greetings Admiral,” Argov said. “I have just spoken with Ambassador Valpraact. We have reached an understanding which she believes she can get the Romulan High Command to sign. They are to take full responsibility for the incident and will read a statement so stating on the Alliance General Broadcast channel. They will surrender one of their number to the Alliance to stand trial. And they will acknowledge and respect the Alliance borders as defined in our Charter. I told her that if they did not comply, then I would turn their warbirds over to the Alliance Intelligence Ministry, and that we would keep their crewmen in custody indefinitely. I have provided them with a direct vidscreen link to each Romulan in our custody. Second, I have promised that we would allow them to appoint five of the captives to inspect the Romulan ships to ensure that they have not been tampered with.

“They want to know the purpose of this base. Of course I told her that I was unable to divulge Alliance secrets until such time as the Romulans were to be accepted into the Alliance.” Argov paused briefly and tapped his chin while he searched for the right words. “I told her that if they were to comply with our demands, I could get the Alliance to agree to entertain their application for admission fairly if they are cooperative over the next two standard years.

“I fully believe that the Alliance leadership will agree to this when they consider that in this region of space there are plenty of races who are eager to become our enemies. The Alliance would be much better off with the Romulans on our side. Besides, there really is nothing more the Council could ask of the Romulans. I would also go so far as to recommend that the trial of the member of the Romulan High Command should result in a suspended sentence, conditioned on good behavior during the two year waiting period. This need not be stated explicitly in our agreement, but it should be understood.

“So you must convince them of the importance of this agreement, Admiral. I’m counting on you! I don’t want this base to become a prison colony, and you don’t want the Romulans as our enemy!”

He signed off and transmitted the document.

A short time later Myron called.

“The system test went extremely well, Commander,” Myron said. “We think we are ready to send the payload.”

“Wonderful news, Myron!” Argov said. “When will you send it?”

“We are waiting for Starfleet to run a few more simulations,” Myron said. “I think we’ll be ready to go in the next 15 to 20 minutes. Will you be joining us this time?”

“I’m sorry, Myron, but I really must attend to the continued operations of the base. I want you to alert me, and I’ll observe on vidscreen.”

“Well, honestly there won't be much to see, Commander,” Myron said. “We have a cylinder filled with neutrinos. We will place it in the Subspace Transporter's chamber, we'll press a few command icons, and it will vanish. That's all you'll see!”

“Doesn't sound very thrilling, does it?” Argov said with feigned disappointment. “You would think that for saving the galaxy, the very least we could expect is a nice explosion!”

Myron gave a hearty chuckle. “Right! But we won't be able to observe anything. We only had time to modify the subspace transporter. There wasn't time to adapt the Tunneling Observatory to enable it to observe the dimension of the aliens.”

“I see. So how long after we deliver the neutrinos should they know that it has worked?”

“They said they would know almost immediately.”

“Very good, Myron— let me know as soon as you are ready to begin!”

Argov turned off the vidscreen, then returned to his contemplation of supply reports. But soon the Duty Officer broke in over the vidscreen.

“Sir! Tactical reports that there is a vessel approaching the base! I'm switching you over to Tactical now...”

“Officer Martins, Sir! We have a large vessel, heavily armed, approaching the base under impulse, Sir!” Martins displayed an image of the approaching craft on one half of the screen.

Argov recognized the ship's configuration immediately. It was a Plarestan assault cruiser, one of the thousands of vessels that the Plarestans had fielded throughout the region to patrol the borders of their empire. Each vessel was half a kilometer in length and had more firepower than a dozen Federation starships.

“It's a Plarestan cruiser, Sir!” Martins announced.

“Yes, so I see,” Argov acknowledged. “It looks as though they are assuming a standard orbit.”

“Yes, Sir, they are” Martins agreed. “They're hailing us!”

“Put them through,” Argov said.

The snarling image of a Plarestan officer filled the vidscreen. Argov, of course, had been given much exposure to Plarestan physiology at the Alliance Academy. Even so the four yellowish snake-like eyes— two either side of the broad, flat head and two at the center of the short ridged brow— always gave him a chill. A Plarestan's dark green skin is covered with coarse scales, each with poisonous spikes. The Plarestan home world has a gravity more than double that of any Alliance planet— so the average Plarestan male at roughly four feet in height has almost three times the strength of a human. But most terrifying were the teeth— two rows deep, each long and sharp and serrated.

“This is Crllshchrrr, Captain of the Lrgsllvvv 3,” came the synthesized voice. “Your base is in Plrrrstnnn space. Evacuate now or face destruction!”

“I am Argov Firin, Commander of this base. I take it, Captain, that you haven't read the Rochelavi Treaty. Because if you had you would know that this

base is within the perimeter of Alliance space by agreement of the Plarestan High Command.”

“We acknowledge no such treaty!” came the snarling reply.

“Then we have nothing further to discuss, Captain. I will only communicate with you in the context of the Rochelavi Treaty. Now if you will excuse me, I have pressing matters to consider.”

“Not so fast, Commander!” the Plarestan Captain said. “I have something you will want.” The Captain pressed an icon on his command panel and a door opened to reveal a muscular and squat Plarestan soldier who was holding a limp and apparently lifeless Captain Voranalla by the neck. “This one told us everything we wanted to know about your base... except its purpose. He said he did not know the purpose.”

“That's right, he doesn't,” Argov said with the appearance of absolute imperturbability. His experience in Qualandrian captivity had made him a eunuch and had subjected him to almost ten years of unrelenting humiliation. But every day as a Qualandrian slave he concentrated on concealing his thoughts, his desires, his designs. Argov had elevated the craft of sublimating his feelings to a high art. His face was a mask that he could shape and color at will. And behind it he could conceal all manner of intent.

“I still have three more members of his crew to interrogate,” the Plarestan Captain hissed. “And there is, of course, his vessel— a most inferior craft with minimal defenses. But of course, if you have more pressing matters...” The Captain made a sign to the Plarestan guard who was carrying Voranalla's body and the guard turned, then went back out through the door through which he had entered.

“What do you want from me?” Argov asked with dispassionate aplomb.

“You will surrender your base to me!”

“I see,” Argov said with a nod. “And why would I do that?”

“Because if you do not, I will kill the remaining three crewmen of your vessel.”

“You have no right to do that!” Argov said with what the Captain took to be anger.

“Aaah, then I do have something that interests you!” the Captain said with a cackle.

“I will have to consult with my superiors. Give me one hour.”

“No!” the Captain railed. “No contact with your Alliance Command! You must decide now!”

“Tactical!” Argov called. In a moment half of Argov's vidscreen filled with Martins' image.

“Yes Sir!” Martins said.

“Put a tractor beam on the Plarestan warship!”

“Right away Sir!”

On the vidscreen, Argov could see the faint greenish glow of a tractor beam closing in around the immense Plarestan warship.

“WHAT IS THE MEANING OF THIS?!” the Captain shouted.

“Meaning, Captain?” Argov said with feigned surprise.

“YOUR TRACTOR BEAM!” the Captain bristled. “You will shut it down at once, or I will kill one of your officers!”

“Officer Martins, would you please increase the tractor beam's pressure by a factor of 5?”

“Certainly Sir!” Martins said cheerfully. He turned to a command panel and made some adjustments.

The Plarestan Captain looked dismally at his monitor, then shouted an order to increase power to the shields. Urgent cries came in from various stations on his bridge— failing bulwarks, hull breaches, fires. The Captain barked orders and monitored for a minute or two as the ship's condition stabilized.

“Tell me, Officer Martins,” Argov said laconically, “how much more could we increase the power of the tractor beam?”

“We could easily increase the power by a factor of 100, Commander,” Martins said confidently.

“I see!” Argov said with feigned surprise. “And if we were to do that, what would happen to the Plarestan warship?”

“Oh, it would be crushed to the size of a pea!”

“Well, I hope it doesn't come to that,” Argov said to Martins. “But suppose that we had to use our defensive weapons against the Plarestan ship. Would we be able to inflict any damage? It does seem to have a very powerful set of shields.”

“We could slice it in half even with her shields at full strength!” Martins said.

“Is that right!” Argov said with seeming astonishment. “I think you're exaggerating, Lieutenant Martins. Surely no normal weapons system could damage a Plarestan vessel! I would like to see a demonstration.” The Plarestan Captain looked uneasily about his bridge. “Why don't we see if we can knock out his warp drive? Let's target their warp nacelles.”

“Yes Sir!” Martins said. His fingers flew over his command panel. “Ready Sir!” he said.

“Captain?” Argov asked. “Are you willing to surrender the Rim Quest and its crew?”

“Never!” the Captain growled.

“If I do this, Captain, your ship will be forced to return to Plarestan space under impulse drive.”

“We of the Plarestan Empire are feared throughout this region because of the power of our ships!” the Captain exclaimed. “You have no idea how powerful my ship is!”

“Oh, yes I do, Captain. I know precisely how powerful your engines are. I know precisely what will happen if I tell my Tactical Officer to fire. We will destroy your ship's nacelles and with them your warp drive.”

“You don't scare us!”

“Then, Tactical, fire at will!”

Plarestan assault cruisers have four warp nacelles arrayed within the hull at the ship's stern. Four simultaneous phaser beams blasted from the base through the hull and ripped apart all four nacelles.

The Plarestan Captain scowled.

“Now Captain,” Argov said calmly, serenely, without the slightest hint of malice, “you will lower your shields and you will surrender the Rim Quest and her crew and yourself to me. If you comply I will release your vessel. If you do not, I will have it sliced in two.”

The Plarestan Captain growled and severed the communications link.

“They're powering weapons, Sir!” Martins said.

“Let them,” Argov said.

“They're firing on us Sir! Shields are holding. Shall I return fire, Sir?”

“Let's first see if they will respond to a hail,” Argov said.

“Yes Sir,” Martins replied.

“Commander!” the Duty Officer broke in. “Engineering reports that it is ready to begin the transfer!”

“Very good, connect me to Engineering— and inform Tactical that I will be unavailable until further notice.”

“Yes Sir!” the Duty Officer replied, and Myron's image filled his vidscreen.

“We're all set, Commander! Starfleet is ready on their end too. We're awaiting your command, Sir.”

“Proceed when ready, Myron,” he said.

Myron changed the vidscreen view to show the subspace transporter's one meter square platform. On it was positioned the short, fat cylinder that held the neutrinos in a containment field.

“I'm setting the timer now,” Myron said. “The containment field will drop in... two minutes.” Myron quickly returned to the command console and touched a sequence of icons. The cylinder seemed to shimmer briefly, then it simply disappeared.

“Done! Now all we need to do is wait for confirmation from Starfleet.”

Argov could hear everyone in the room cheering.

“Excellent, Myron— my congratulations to all for your hard work!” Argov enthused. “But now I must turn my attention to the Plarestan attack cruiser that is in orbit around our base.”

“Plarestan cruiser?” Myron asked. “I had no idea, Sir!”

“You were busy saving the galaxy, Myron— I didn't think it important to trouble you with news of an irresponsible Plarestan Captain who has no concern for the welfare of his ship.”

Argov reset the vidscreen's view to show Officer Martins. “Any luck contacting the Plarestan Captain?” he asked.

“No Sir!” Martins answered. “But they have fired five photon torpedoes.”

"Let's punch a hole in their hull," Argov said. "*That* should get their Captain's attention! Can you tell where they are holding the Rim Quest?"

"They're holding it in their starboard cargo bay," Martins replied.

"Then why don't we target the port cargo bay?" Argov suggested. "Just do enough damage to create a hull breach, but not enough to cripple the ship."

"Certainly Sir!" Martins replied. He worked at his command console for a few moments, then looked up. "Ready Sir!"

"Fire at will," Argov said.

Another pencil-thin ray of yellow energy bore into the port side of the Plarestan ship and ripped open the port side cargo bay. They could see a flotsam of cargo and Plarestan bodies floating out into space.

"They're hailing us, Sir!" Martins said.

"Commander!" the Duty Officer broke in. "Engineering reports that the transfer didn't work!"

"What?!" Argov exclaimed. "Connect me immediately! And tell Tactical..."

"That you're unavailable again, yes Sir!" the Duty officer said as he switched the vidscreen view to show Myron's perplexed visage.

"What happened?" Argov asked.

"We don't know, Sir!" Myron said. "We believe that everything worked exactly as we had planned it— but the Subspace Tunneling Observatory just confirmed that the aliens are still attacking three suns. Apparently the payload either didn't detonate, or it wasn't targeted correctly."

"Or it wasn't powerful enough," Argov suggested.

"Hmmm," Myron said, "I suppose that could be possible..."

"Listen, Myron, I don't think there is anything I can do to help you solve this problem, and I really need to get back to dealing with our stubborn Plarestan visitor."

"The Plarestan cruiser!" Myron exclaimed. "By any chance do you have that cruiser locked in a tractor field?"

"Yes, we do," Argov replied. "But what does that have to do with transporting neutrinos to another universe?"

"When Starfleet ran their simulations to calibrate our modifications to the transporter, they asked us about all of the Romulan ships. They told us that they had to know about anything that might affect the gravitational field of the base, as even a one thousandth of a percent error would be enough to affect the targeting!"

"So I have to release the Plarestan ship?" Argov asked.

"Not necessarily, Sir," Myron said. "Let me contact Starfleet to see if we can compensate."

"Myron," Argov said, "this ship has the Rim Quest and her crew! We can't just destroy the ship, and we can't just release it either! We need to get them to release the Rim Quest to us— and at the moment they are not cooperating."

"I see," Myron said. "Can you at least keep them stationary for a while?"

“Certainly,” Argov said. “Contact me when you have more information.”

“Yes Sir!” Myron said, and Argov reset his vidscreen to view Martins.

“Report!” Argov said.

“They haven’t fired on us again, Sir!” Martins said.

“Let me speak to the Captain.”

In a moment, the vidscreen shivered and showed the angry face of the Plarestan Captain.

“Commander, you try my patience!” he growled.

“I apologize for my inattention, Sir,” Argov said with apparent sincerity, “but we have an extremely important experiment underway that I need to continue monitoring.”

The Captain looked puzzled, opened his jaw as if to speak, then hissed but said nothing.

“Now once again I demand that you to surrender our research vessel the Rim Quest, its crew, and yourself,” Argov demanded.

The Captain bared his teeth and growled but didn’t reply.

“First I’m going to reduce the tractor beam to normal,” Argov said. “Then I want you to put the crew of the Rim Quest back on board their ship along with the body of Captain Voranalla. After they are on board, you will get on board with them. Then your ship will drop its shields and power down its weapons systems. When that has been done, we’ll drop the tractor beam and you will release the Rim Quest for a return to our base. If your ship powers up its weapons, I will destroy it. If your ship attempts to leave orbit, I will destroy it. If it fails to release the Rim Quest, I will destroy your ship’s engines. Do you understand?”

The Plarestan Captain merely grunted. But after he had spent a moment growling and hissing he ordered the Rim Quest crew members to be taken to their ship.

“Martins!” Argov called. “Reduce the tractor beam strength on the Plarestan ship to normal.”

“Yes Sir!” Martins said.

“Captain!” Argov called to the Plarestan ship. “We have reduced the field strength of the tractor beam to normal. We will expect to hear from the crew of the Rim Quest shortly.”

Again, the Plarestan Captain merely grunted.

Chapter 32: Release

How long had it been, she wondered? Two days, three maybe? She had lost all sense of time. Hunger and lack of sleep had made her weak and confused.

The room in which she and Vena and Officer Wrentz had been locked was devoid of furnishings: there was nothing more than a hole in the floor for bodily wastes and a light glaring overhead that was never turned off. They had been fed only water and a bit of hard bread that was too tough to chew. And it was cold— so cold that they had to huddle together to keep warm. Theresa might have found it titillating if she hadn't been so weary. She had noted to herself more than once that Officer Wrentz was tall and fit and ruggedly handsome.

They had just finished their transmission to Commander Firin when the Plarestan ship appeared. As soon as Mathers said she had the information they needed, Captain Voranalla jumped the ship to warp 3 for 2 seconds – a very risky maneuver inside a planetary system— then headed for the 2V45903 asteroid belt where he hoped to lose the Plarestans in the chaotic jumble of rock and ice. He flew in among the asteroids at full impulse, then slowed quickly as the density increased and ducked behind an immense rock the size of a small moon. He found a canyon roughly two kilometers deep— he dove down and slipped the ship into a huge cave, then landed and shut down the engines and every energy source they could— even life support.

The Plarestans scanned the region intensively, they patrolled for hours and found nothing. Voranalla waited until the temperature inside the Rim Quest dropped to just a hair above freezing, then powered up the life support systems again. They monitored the known Plarestan scanning frequencies for another hour and, finding nothing, and decided it was time to head back to the base. Voranalla pulled the Rim Quest out of the cave and up above the asteroid. Again they paused to monitor for Plarestan scanning. Again they found nothing— so Voranalla set a course toward Goridon perpendicular to the plane of the planetary system and jumped to warp 7. His plan was to head toward Goridon, then double back and return to the base.

But the Plarestans were waiting for him. They were drifting at the perimeter of the asteroid belt and were monitoring for a warp signature. As soon as the Rim Quest went to warp drive, they jumped to warp 8 and quickly closed in.

Once Voranalla realized that they were being followed he knew they wouldn't be able to outrun the Plarestans. He also saw that it was a heavy battle cruiser, not just a patrol ship, that was behind them. What, he wondered, was such a powerful ship doing out this far from the Plarestan hunting grounds? He opened hailing channels and slowed the ship to impulse.

But the Plarestans were in no mood for conversation.

“Power down your engines and your shields and prepare to be boarded,” the Plarestan Captain snarled. And after that the Plarestans wouldn't respond to any hail. Voranalla transmitted extensive references to the Rochelavi Treaty—

especially those sections relating to the treatment of prisoners— but the Plarestans provided no evidence that they had heard.

The massive cruiser pulled up alongside the Rim Quest. Having heard no reply, Voranalla left the shields up. But the Plarestans simply fired on the Rim Quest and destroyed the warp drive and the shield generator in one blast without so much as a request to shut down their shields. Then a boarding party of some twenty Plarestans beamed over and quickly took the crew captive. Once on board the Plarestan ship Voranalla was taken away for what they could only assume would be a terrifying interrogation.

They dared not talk among themselves about the ship or their mission—they assumed that the room was bugged. So generally they said nothing. But occasionally Theresa looked into Calvin's eyes and saw what she thought might have been a flicker of interest.

Suddenly the door snapped open and a stout Plarestan dragged in Voranalla's limp frame, then dropped it near the door. They could see cuts all over his face, and the shreds that remained of his uniform revealed welts and burns over his entire body. Calvin rushed forward and felt for a pulse.

“He's breathing,” he said, “but weakly. He's unconscious.”

They huddled together to share what little heat they had, and there they waited for almost an hour until the door snapped open again. A pair of armed Plarestan guards directed them to follow. Theresa and Calvin took the Captain by the arms and dragged him along.

They walked down a long hall, then got in a turbolift and headed toward the stern of the ship. Theresa realized that they were headed toward the bay where the Rim Quest had docked.

“They must be taking us back to the ship!” she whispered.

Calvin nodded.

“It will be nice to get back to the base,” Vena said softly.

“I just hope we get back soon enough that Dr. Targov can help the Captain,” Calvin said.

“When we get back to the ship we can use the med kit to get him stabilized,” Vena said.

The others nodded silently.

“But why would they let us go?” Theresa asked. “It's not like the Plarestans.”

“No, it isn't,” Calvin agreed.

When the turbolift stopped, they were escorted down another long corridor to a broad door attended by two more Plarestan guards. The door snapped open and they were led into the docking bay. The Rim Quest was exactly where they had left it, but the dock itself had a pile of weapons, scanners, tools, and instruments that had obviously been taken from the ship. Theresa noted that the med kit had also been removed. Each device had a tag with a bit of Plarestan scribble. It looked as though anything not actually part of the ship had been removed and inventoried.

The guards motioned them toward the boarding ramp and they hurried aboard.

“What now?” Calvin asked. “We can't go anywhere until they drop the docking bay shield.”

“Let's get ready to leave the moment they do!” Theresa said. They carried Lucien to the Captain's quarters and settled him in his bed. The Plarestans had even taken his sheets and pillow.

“You and Vena prepare for takeoff,” Mathers said, “and I'll tend to the captain.”

“OK,” Wrentz replied, and he headed toward the bridge with Vena.

Mathers cupped her hand and got a bit of water from the small sink, then dabbed Lucien's forehead and face. She cleaned up his wounds as best she could without bandages or towels, then rose to inspect the engines.

The Rim Quest was a small craft— no more than 100 meters in length. From the Captain's compartment she had only to walk another 50 meters down the central hall and enter the meter square fire door to Main Engineering.

She checked the main systems— warp drive was down, as were the shields— but that was the result of their initial confrontation with the Plarestan cruiser, not of later Plarestan tampering. She tapped the command panel's vidscreen and it displayed the faces of Vena and Calvin at the helm.

“Looks like the primary systems are OK,” Theresa said. “We can take off whenever you're ready!”

“They've just dropped the docking bay shield!” Vena said.

Calvin shut the loading bay and released the docking clamps, then eased the ship away from the dock.

“There's a tractor beam on the cruiser!” Vena said. “An extremely powerful one!”

“Hmmm,” Theresa mumbled. She checked her instruments and saw that indeed the power of the tractor beam was immense— far too powerful to be generated by even a normal planetary defense system. “We must be near the base!” she shouted.

“Aaaiiiiiieeeeeaaah!”

Theresa quickly looked up at the vidscreen— a Plarestan was standing behind Calvin who was slumped over. Blood was splattered all over the bridge— and Calvin's head appeared to have been crushed. Theresa could just make out the form of Vena scrambling toward the exit— but the Plarestan turned and grabbed her by the neck, then snapped it. Vena fell listless to the floor, and the Plarestan ran toward Engineering. She could just make out the epaulets of a Plarestan Captain on his uniform. What could the Captain of the Plarestan cruiser be doing on the Rim Quest? She saw that he was armed with a Plarestan blaster, even though he had attacked Calvin and Vena bare handed.

Theresa slammed the Engineering fire door shut and secured it, then checked to see where the ship was relative to the Plarestan cruiser— it had just cleared the docking bay. She switched to a view of the main corridor leading to

the Engineering fire door and could see the Plarestan Captain using his blaster to blast a hole in the door to Engineering.

It was known that it would take at least 5 minutes to blast a hole through the fire door with a Federation phaser, and Theresa knew that Plarestan blasters were no more powerful than a phaser.

She quickly checked the Captain's quarters– Lucien was undisturbed. So she shut and locked the door to his cabin, then shut and locked the door to the helm.

Next she checked the com system– everything seemed operational. She set the system to the Alliance standard emergency frequency.

“This is Engineer Mathers of the Rim Quest!” she called. “Please respond!”

“This is Alliance Base Command,” came a nondescript male voice.

“The Plarestan Captain is aboard– he's killed two of my crewmates, and he's after me!” Theresa said. “Are you holding the Plarestan ship in a tractor beam? And if so, can you release the Rim Quest?”

“One moment please,” the voice said. The com line was silent for a moment, then there was nothing but static.

Chapter 33: Return to Base

“Mathers?” Argov asked. On the line there was nothing but static. “Are they jamming us?” he asked Martins.

“Hmmm,” Martins mumbled, “let's see... Yes Sir, they are!”

“Don't release that tractor beam! We have to wait until we hear from Myron! Can you lock onto Mathers and beam her aboard the base?”

“No Sir,” Martins replied. “Their jamming is too intense. I can't get a lock on anyone on the ship.”

“And if they're jamming, then we can't hail them either, right?”

“Right.”

“Then we just have to wait,” Argov said. “But I want you to target the Plarestan ship's impulse engines. I want to destroy them as soon as the Rim Quest is able to move away.” Argov got Myron back on the vidscreen. “Myron! I need a report!”

“We're about to do our next run, Sir. We're just waiting for word from Starfleet— they needed some time to generate enough anti-neutrinos.”

Argov waited for minutes that seemed like hours. He could see the engineering crew waiting and monitoring but otherwise idle. But the jamming from the Plarestan vessel was such that they couldn't tell where the Rim Quest was in relation to the cruiser. He paced, he knotted his hands, he ground his teeth.

At last Myron's face reappeared on the vidscreen.

“We're set!” Again, he stepped up to the transporter platform and set the timer. Then he returned to the command console and brought up a force field around the transporter platform.

“Is that a force field, Myron?”

“Just a precaution, Sir,” Myron said with a grin.

“But I thought Professor Mair said there was no risk of explosion.”

“That's what he said, Sir, but better safe than sorry is what I always say!”

“Very well, Chief, proceed.”

Myron touched the command icons to transport the cylinder of neutrinos, which shimmered briefly and disappeared.

ZAM! A flash of light slammed into the force field wall, making it sizzle with fierce blue sparks.

“WHAT WAS THAT?” Argov demanded.

“It... it looked like an explosion, Sir,” Myron offered.

Argov switched his vidscreen to a view that showed the the Federation Arial base transporter room. Several people had been knocked to the floor, among them Prof. Mair. And there was damage to much of the equipment as well. Prof. Mair struggled to his feet, holding his left upper arm which was bleeding profusely.

“Well, that would seem to be confirmation that it worked!” he said with a

broad smile.

“Are your people hurt, Professor?” Argov asked.

“Yeah, we have some injuries,” Haywood said. “A medic team is on the way– but I don't think there will be any permanent damage.”

“That blast we experienced– would it have been powerful enough?” Argov asked.

“Well, we won't know for sure until we check to see if they are still attacking our stars,” Haywood said. “But don't judge the power of the blast from the little that somehow ricocheted back through our inter-dimensional tunnel. Remember the tremendous differential between our two universes, Commander. The blast would have been vastly more powerful on their side.”

Argov nodded. “Ah, yes, I do seem to forget that little detail,”

“We will check on the stars that we know they were attacking to see if they have stopped,” Haywood said. “This will probably take a few minutes.”

A medic arrived and quickly attended to Haywood's lesions. Again they waited for minutes that seemed like hours. At last the image of the chief science officer appeared on Haywood's vidscreen.

“We'd like to observe a little longer before making a final pronouncement,” he said wearily, “but initially at least it looks like it worked.”

Cheers erupted throughout the transporter room.

“We did it!” Myron bellowed in his booming baritone; someone released a confetti bomb and the room was soon busy with bits of colored paper. Then Myron pulled a bottle from behind his console.

“A bit of vintage champagne, Commander?” he said with a wink– and with a sharp tug he popped the cork.

“Perhaps later, Myron,” Argov answered. “Professor!” he said to the vidscreen carrying Haywood's image. “If you have to try again, will it hurt if we move the Rim Quest away from the Plarestan cruiser?”

“Oh, I don't think so,” he said. “We can always just recalibrate.”

“Wonderful! Thank you so much for your help!” Argov got Martins back on line. “Shut down the tractor beam– but be prepared to destroy the Plarestan cruiser!”

“Very good Sir!” Martins said. His hands flew over the command panel and the tractor beam was extinguished.

The Plarestans were still jamming, so they couldn't contact the Rim Quest. They watched the monitor anxiously for a minute or two– but then the Rim Quest gradually pulled away from the cruiser and headed toward the base.

“Mathers?” Argov called over the com line. “Engineer Mathers of the Rim Quest– do you read? This is Commander Firin of the Alliance Base. Please respond!”

“Commander!” came Theresa's voice. “It's good to hear your voice Sir! I've got command of the Rim Quest. Captain Voranalla is alive but he will need emergency medical treatment when I return. Officers Wrentz and Tularea are both dead, Sir.”

“What about the Plarestan Captain?” Argov asked.

“He's the one who killed both Wrentz and Tularea, Sir,” Mathers replied. “I had locked myself in Engineering, but he was coming after me with a blaster. So I beamed him into space, Sir.”

“Into space, you say?”

“Yes Sir, I did Sir. Wide dispersion, Sir. I don't think they'll be able to retrieve him, Sir.”

“Very well, Mathers,” Argov replied, “we'll consider that he has paid for his belligerence. We await your return!” He cut the connection and switched to Martins. “Officer Martins, have the Plarestans stopped jamming us?”

“Yes Sir, they have” Martins reported.

“Open a docking bay for the Rim Quest,” Argov said, “and see to it that a medical team is there to meet them.” Martins opened the docking bay and the Rim Quest began to move toward it.

“Now open a hailing frequency,” Argov asked.

“Hailing frequency open, Sir,” Martins replied.

“Plarestan vessel, our ship the Rim Quest is preparing to dock. If you do anything to impede the Rim Quest, I have given my Tactical Officer orders to destroy your ship.”

They watched as the Rim Quest came in on a normal approach and docked without incident.

“Now raise the docking bay shields, Martins,” Argov said.

“Aye Sir,” Martins replied. The shields went up.

“Plarestan vessel,” Argov said. “Your Captain is dead. He attacked and killed two of the members of the Rim Quest crew. In self defense, an engineering officer of the Rim Quest beamed him into space on wide dispersion. I doubt that you would be able to recover his body. In any case, our ship the Rim Quest has been returned to us, your Captain has paid for his hostility with his life, and I now consider the matter closed. You are free to leave when you will. But I warn you. If more Plarestan vessels appear in this region, we will defend ourselves with the full power of this base as provided in the Rochelavi Treaty.”

After a silent moment, the Plarestan ship left orbit on impulse drive, on a heading toward the closest Plarestan base.

Chapter 34: Infinite Repose

"Incoming message from Alliance Command," said the computer's synthetic voice.

Argov rolled over and looked groggily at his clock. Almost 20 hours had passed since he had fallen asleep— featureless, inchoate hours. It felt as though he hadn't moved an inch in any of those hours.

"Computer," he said, "play message."

It was Admiral Triminol.

"Commander!" she said with a smile. "I'm pleased to inform you that your terms for an agreement between the Alliance and the Romulans have been fully accepted. We have now moved to the next stage of detailed negotiations. We expect to have a document signed within the next 72 hours.

"In the meantime, we think it would be a show of good faith if you were to release two of the five ships, each with a full crew. I know you will consider this suggestion fairly, and I will accept your decision.

"Thank you for your outstanding leadership, Commander. I can assure you that your mission reports have already received a wide and appreciative audience here. Triminol out."

Argov had a shower and a simple meal. He went down the hall to his office and ordered the release of two of the Romulan ships, then followed up on status reports from all over the base. Starfleet reported that there were no further instances of artificial novae. Operations stated that all of the damage done in the confrontation with the Romulans had been repaired, except for Docking Bay 4, the one that had been blasted apart by Commander Vertosh. It was expected that it would be another two weeks before the bay would be completely repaired. And a Plarestan Ambassador had called to deny any responsibility for the attack on the Rim Quest crew, his outrageous claim being that the Plarestan High Command had no knowledge whatsoever of Captain Crllshchkr's actions or designs.

Argov then called Lieutenant Jacobs.

"We're ready, Sir!" she said.

"Very well, Lieutenant," he said heavily, "I'm on the way."

Argov left his office and got in the turbolift, thinking during his short trip of the events of the last few days. When he arrived at Cargo Bay 5, he strode over to the Lieutenant and shook her hand.

"I wanted to thank you for the tremendous job you have done," he said. "I know that this was a very difficult thing that I asked you and your people to do."

"All in the line of duty," she said with a shrug.

"Let's begin." Argov signaled his support crew who sounded a general alarm, then set all general purpose vidscreens on the base to the base broadcast channel.

"Ladies and Gentlemen, your attention please" Argov began. "May I direct your attention to Cargo Bay 5." He waited a minute or two for the more than

40,000 base personnel to become aware of the broadcast. He was standing beside Lieutenant Jacobs, and her patrol was standing at attention beside a barge stacked high with coffins.

“It is with a heavy heart that we recognize those of our comrades who have made the ultimate sacrifice. The Romulans attacked us because they believed our base harbors an extremely powerful weapon. They were wrong about that. Some might think that these noble dead we honor today died senselessly, without purpose. Don't you believe it for one minute! I can now reveal, to those of you who do not yet know, that this base has recently completed a mission that has saved literally billions of lives. Aliens from another dimension were turning stars in our galaxy into novas, and it was only because of the efforts of people on this base that we were able to put a stop to it.

“The Romulans do not yet know or appreciate what we have done for them. I believe ardently that one day they will. And when they do, they will know that those whom we honor today gave their lives in pursuit of the eternal truths of science and in the defense of the galaxy.

“We loved these good, noble people who expected so little and who gave so much. Now we commend these our dear friends and comrades to the infinite repose of the cosmos.” He nodded to Lieutenant Jacobs, and she launched the barge on a slow, stately drift toward the docking bay's boundary. Argov and the honor guard marched to the rear of the docking bay and a shield was raised before them. Then the bay's main shield was dropped and the barge headed out slowly into space.

“We commend them to the eternal,” Argov continued. “And we commend their names to the limitless memory of all.” The vidscreens switched to a view of the Grand Promenade, where two security officers stood at attention beside something huge covered by a gray sheet whose corners waved in the slight breeze of the air conditioning. On signal, they pulled away the cover to reveal an immense block of blue-gray metal. “Today we dedicate this plaque in the Grand Promenade. It shall be our monument to the memory of these heroes. It contains the name of every person who died in our confrontation with the Romulans. And from this moment forward it will carry the name of every person who dies in the line of duty on this base.”

Once clear of the docking bay, the barge's thrusters impelled it out beyond the starbase on a slow descent to the pulsar.

Chapter 34: Prospects

Therenin took another sip of his deplorable coffee. It was the day following their final success and Admiral Yergevneyov had scheduled an analysis meeting for the heads of the Scientific Research departmental heads. It was decent of the Admiral, now that the ordeal of the last week was over, to at least allow them all a few hours' sleep. But was it really necessary for him to call the meeting for 6 AM?

Of most interest to Therenin was the presence of two other Admirals not normally seen at these meetings— Admiral Jacob Hannover, head of Starfleet Security, and Admiral Parvilia Xantharkh, Commander Of Joint Defense Systems.

Admiral Yergevneyov breezed into the room and everyone rose.

“At ease, at ease,” the Admiral said, motioning them all to sit. He stood at the front of the room in his customary stance, looking more like a boxer ready to strike than like a sage and sedate administrator. “Ariel was once the most secret project in Starfleet. Now everyone in this room knows of the project and has in fact contributed to it. We are entering a new era of the Federation, one in which we can instantly communicate with outposts across the galaxy. But Ariel is still a secret, and its technology cannot yet be revealed to anyone beyond this room. Now, Professor Ochohanno, your report please” he demanded.

Therenin took one more sip and rose.

“As everyone in this room is already aware,” he said, “we were successful in stopping the destruction of stars by the aliens. In the process we have gained knowledge about inter-dimensional physics, thanks to the mathematical prowess of the Valencriara.

“Now that the crisis is over, we have new opportunities and challenges before us. Work is continuing on the Subspace Tunneling Transporter technology. We hope one day to achieve its original design objectives, though at present it appears that this will be a very difficult task. We also now have the opportunity to consider a completely unexpected use for this technology. We now know that with some relatively modest modifications to our equipment we are able to use this technology for inter-dimensional transportation. This is a completely new discovery.

“And finally, we have the chronicles of Officer Decker's inter-dimensional travels. The Valencriara discovered this trove of knowledge and experience as another hidden signal in the ripple effect. These records will no doubt provide us with decades of scholarly delights.” Therenin bowed slightly toward the Admiral, then sat down.

“Thank you, Professor,” the Admiral said. “Professor Perthama, may I have your report?”

Corial Perthama nodded and rose. “We have gained many wonderful and unexpected findings in biology. Three weeks ago no one would have supposed it possible for beings such as the Valencriara to exist. But not only do we now know that it is possible, we find that these marvelous beings have a rich and noble

history, a mode of communication we could never have imagined, a love of music, and a profound grasp of mathematics. I must also say that Engineer Mathers was absolutely brilliant in her analysis of the capabilities of these beings. We all owe her a tremendous debt of gratitude.”

Admiral Yergevneyov directed a discussion of the more mundane aspects of science research administration that droned on for another 30 minutes, then finally thanked them all for their participation and dismissed all but Therenin.

After the other academics had left, the Admiral approached Prof. Ochohanno, waving a printed document. “I can't accept this,” he said. “You are still the finest Scientific Research Department Head we have ever had. I can't let you retire now. Besides, what would you do? I know you too well, Therenin. You are not the sort who can spend your golden years in idle relaxation. You want challenges, Therenin, intellectual challenges— and there is no greater place to find them than right here in Starfleet.”

“There are plenty of highly qualified people here, Admiral,” Therenin said. “Corial, for instance. She's a brilliant biologist, she commands the respect of every researcher in Starfleet, and she has a fine head for administration.”

“But what she knows about inter-dimensional physics wouldn't fill a thimble,” the Admiral objected. “I need you, Therenin, and you need Starfleet!”

“Admiral,” Therenin said softly, “I... I'm weary, Sir. This last episode merely proved at last that my retirement is long overdue. Will I miss this?” he asked with a rhetorical sweep of his arms. “Certainly. But It is time. And don't worry about my personal entertainment, Admiral. I have a daughter I haven't spoken to in twenty years. I'm going to seek her out, Admiral. Perhaps in the winter of my life I can at last recover a bit of the life I lost when Jaredeza left me.”

The Admiral nodded, then pressed his hand to the Professor's shoulder. “Very well, Therenin. I wish you all the best.”

Therenin arose to leave; and Admiral Hannover also rose, then approached and took his hand.

“Allow me to thank you, Professor,” he said warmly, “for your many years of outstanding service.”

“Up until last week, I enjoyed every minute of it,” the Professor said. Then he directed a shallow bow to each of the Admirals present and left the room.

When the door closed, Admiral Yergevneyov turned to the other two. “These Rimmers, as they are so derisively called,” he said, “have definitely proved their mettle. The Commander of the base led his people valiantly in their defense against the Romulans.”

Admiral Xantharkh nodded. “I fully agree,” she said. “But the Senate is not yet ready to welcome them into the Federation. There is still too much rancor about 'accommodation'.”

“They have adopted Starfleet regulations and policies,” Yergevneyov rejoined, “and they have shown themselves to be very astute negotiators. I say we should work with them. I say we should expand our reach by working with them to build another base!”

“Absolutely!” Hannover exclaimed.

“We can certainly continue to work with them,” Xantharkh said calmly, “but we have to go slow. We can't afford to raise suspicions in the Senate. We can continue to support the Hermes, but we can't expand our involvement there. Not yet, anyway.”

“Why not?” Hannover pressed. “Think of the opportunities! We would have allies in a part of the galaxy that is unexplored!”

“Opportunities, perhaps,” Xantharkh replied with a nod, “but certainly dangers as well. There are Plarestans, Qualandrians, and others of whom we know very little. I believe that we should encourage the Alliance to support Starfleet values, but we need to consider any expansion carefully.”

“When can we move forward with the WebFire project?” Admiral Hannover asked.

Admiral Yergevneyov scowled. “My best people are telling me that it wouldn't make any sense!”

“Won't make sense!” Hannover said. “How could it not make sense to defend the entire Federation with the most advanced weapons system ever devised!”

“It is certainly possible to put highly powerful phasers on our Subspace Tunneling bases,” Yergevneyov replied. “But as we have explained time and again the problem is with the targeting, not with the power! If your target is a fleet of enemy ships moving into Federation space at a distance of, say, 100 light years from any such base, the beam will take 100 years to reach its target! That renders it useless!”

“I'm fully aware of that issue,” Hannover retorted, “and if that's what WebFire were about, then I'd be against it too!”

“I think,” Admiral Xantharkh interjected, “that Jacob believes that we should be able to design some new type of weapon— something like a phaser but not a phaser. Something that uses this new subspace tunneling technology.”

“Exactly!” Hannover exclaimed.

“And again my people are telling me that they have no reason to believe that such a system would be possible with our current state of knowledge,” Yergevneyov replied. “Our system is a two terminus system. It simply isn't capable of transmitting anything to a remote location without a subspace tunneling receiver at the other end!”

“But isn't that exactly what you did to eliminate those other-dimensional aliens?” he retorted.

“Well, yes, more or less, I suppose,” Yergevneyov relented. “But the purpose of a second terminus is to collimate the beam. Without one, the beam disperses roughly one percent per thousand light years.”

Admiral Xantharkh raised her hand. “Perhaps,” she said calmly, “we could launch a small development project— one that wouldn't commit us to a specific solution, but which explores the possibility of using this technology for remote targeting.”

There was silence in the room as the two men glared at each other. Then at last they both nodded.