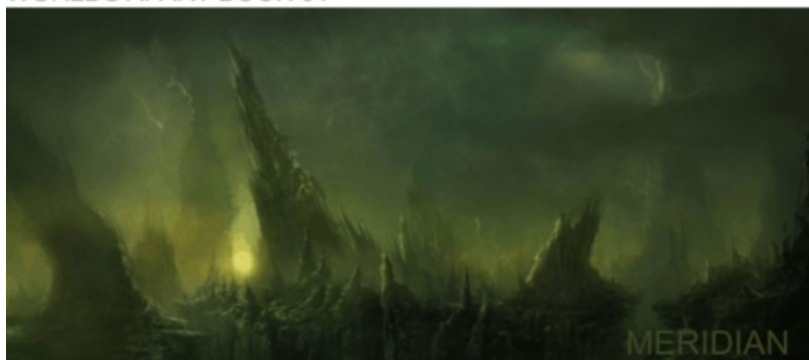


WORLDS APART BOOK 01



JAMES WITTENBACH



Worlds Apart Book One: Meridian

What a long, strange trip this will be



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Manufactured in the United States of America

Library of Congress Cataloging in Publication Data

Wittenbach, James

Worlds Apart Book 01: Meridian

I. Title

ISBN 0- 0-9763384-0-8

Prologue:

The Called and the Chosen

Eddie Roebuck

New Halifax, Sapphire

It was an hour or two past midnight on the last night of the Platinum Festival. Somehow, Eddie Roebuck had ended up on the top of the great stone fist of Kennecott Rock with his best friend Barnes Asahi and two girls he did not remember meeting. The top of the rock was crowded with people who had come to see the lights of the city and the harbor. By day, New Halifax, Carpentaria, was not much to look at; it was a working town, spread out across the rocky islands of Halifax Harbor Bay, but on the nights of the festival, when the city was lit up (along with most of its citizens), the view was spectacular. The bridges that joined the islands and the mainland were strung with lights like incandescent pearl necklaces. The lights of the buildings dappled in the waves of the harbor. Giant holographic advertisements and corporate logos danced in the sky above the city like neon seraphim.

Any night of the year, you could go down Cobalt Avenue – the stretch the locals called “the Gauntlet.” – and get tossed out of one bar and land in the next from dusk until dawn. It was different at festival time: The bars stayed open during the day. He and Barnes were utterly destroyed. The women looked like they could shower, change and be ready for church in half an hour. Women amazed him.

“I’m going to retro-digest,” Asahi reported.

“Neg, beauty,” said Roebuck. “Don’t be crude. Alcohol is for internal use only... internal use... aw, slag...” Asahi was already on all fours, heaving onto the badly littered gravel of the footpath.

“Poor Baby,” cooed the girl with the tattoos and the artificially blond hair. She knelt beside Asahi, who rolled over and lay his head in her lap.

Roebuck couldn’t tell whether his friend’s position was technique or happy accident. He turned to the brunette, whose name he could not remember. She raised her bottle of Old Matthias (“The Ale the Made Matthias Significant”) and downed all but the last swallow before passing it to him. Roebuck reached for it, missed on the first grab, then caught it and sucked down the remainder. He put the bottle down and tried to focus on the woman.

“Are you having a good time then, Eddie?” the brunette asked in the annoying fake Republic accent she affected. Republic was Sapphire’s sibling world, orbiting the other sun of their double star system.

“Za.” He reached toward her and missed.

“I think this one’s asleep,” the pseudo-blonde called-out.

“Roll him on his side so he won’t choke if he decides to review his beer again,” Roebuck said, then added to the brunette: “Scuse my crude. Maybe we should go back to my place, y’know?”

“If we sleep now, we’ll be all hung over in the morning.”

“Not if we keep drinking.”

She checked her chronometer and grabbed his arm. “Come with me, Eddie. It’s almost time.”

Eddie liked the sound of that. She pulled him away, down a trail that led to the dark side of the rocks, away from the lights of the city where the night was as black as it gets. There were no moons visible in the sky and the stars were brilliant. Even the black and orange glow of the Monarch Nebula was visible. Eddie noticed none of it. All he knew was that an intoxicated woman was taking him into a dark place where nobody could see them, and that this was the general template for most of his sexual experiences. He moved in to kiss her, expecting lips, but finding neck and ears. He kissed anyway. “Eddie...,” she said.

“That’s me.” He continued planting wet sloppy kisses on her.

“Eddie,” she said again.

“Za,” he put his arms around her waist and rubbed his body into hers.

“Eddie,” she said, much louder, pushing him off her. “Look!” She pulled the hair at the back of his head, twisting his head up. She leaned close and whispered in his ear. “The shuttle to Republic is about to

launch."

Roebuck looked up and tried to focus. A second later, a tiny halo of silver-white light appeared in the sky, expanded and dissipated.

"It's off," she said with something like reverence. "One day, I'll be on that shuttle."

"Za?"

"Za, when they began taking applications for the Odyssey Project, I camped out in front of the recruiting office for three days so I could get my application in first."

"Congratulations," Eddie whispered although he didn't see what good it would do to be first. The selections were made randomly, in keeping with Sapphire's egalitarian traditions.

"Did you sign up?" she asked him.

"Za, for sure... well, I mean, I haven't yet, but ..."

Her body stiffened. "You haven't applied for the Odyssey Project? Don't you want to go into *space*?"

"Za; I told you was gonna sign up. It's all part of my plan. See, I'm gonna get a job with the Mining Guild..."

"I'm not talking about the *Mining Guild*. I'm talking about the greatest adventure of all time..."

"Exactly, me, too." Eddie returned to his kisses.

"Eddie... neg..." She pushed him away. "You have to register for the Odyssey Project. You have to register this very instant."

The next thing Eddie knew, he was standing in Molybdenum Square, squinting into the gray light of a foggy dawn. The other three stood off to the side as he approached the recruiting kiosk, a crystalline obelisk about three meters high, with lights dancing on the interior. The kiosk was a node of the Odyssey Project Artificial Intelligence network. The AI's designed their own interfaces and were inexplicably fond of the translucent-tombstone-with-dancing-lights design. Across the top of the kiosk, the slogan of the Odyssey Project was emblazoned in flashing red neon: "The Greatest Adventure of All Time."

"Hoy," he said to the AI. "I'd like to apply for the Odyssey Project."

"State your name, please," said the kiosk in a pleasant feminine voice as the dancing lights brightened and jumped

"Eddie Roebuck."

"Good morning Eddie Roebuck. Personal Access Codeword?"

"Pretty-Frankenstein-zero-zero-zero-zero."

The kiosk scanned him with a beam of blue light. Eddie saw his ID photo come up on the screen. It was a couple of years old, but he figured he still looked pretty good. The dark brown eyes and cafe-au-lait skin, the sharp nose and mischievous grin. His face, he figured, was the only good break he'd ever gotten.

"Does the Odyssey Project have permission to review your public records, including educational, professional, and credit files?"

"Za."

"Thank you and good luck, Eddie Roebuck."

The kiosk's internal lighting faded. He stepped away from the kiosk and down the two steps to his waiting friends. "I did it."

"Oh, Eddie," said the brunette, shoving her hands under his jacket. Roebuck kissed her forehead. Roslyn, he thought suddenly; that was her name. And her friend was Cecily.

"Hey, I'm starting to feel sober," said Asahi. "Let's find a bar and breakfast."

Eddie looked to Roslyn for her opinion and was answered with an affectionate squeeze from under his jacket. "Neg," he said. "Let's get on back to my place."

"You know," said Barnes Asahi as they walked away from the square. "The odds against you actually being picked for that are like three million to one."

Roebuck smiled. He not only knew it, he was counting on it.

Matthew Driver and Kayliegh Driver

Midlothian, Republic

Through the canopy of the shuttlepod, beyond Matthew Driver could see nearly the entire southern hemisphere of his home-world, 10 066 Pegasi II, Republic. The greater part of that great gray, marginally habitable rock was obscured by white and yellow clouds.

“Overlay, Meteorological,” Kayliegh Driver, his twin sister, commanded. Yellow and aqua blue sigils appeared. She whistled low. “There’s a huge storm pushing across the Trans-Arctic Shield, converging with another front west of Midlothian.”

The ship shuddered against a high altitude updraft. When Matthew reached for the stabilizer controls. Kayliegh had to squeeze far back in her seat in the cramped cabin. “What kind of landing conditions can I expect?” he asked.

“Visibility zero. Ion interference with landing guides and com-links. Surface winds gusting to 200 kilometers per hour. Ammonia, sulphur dioxide, and methane contamination from the Cauldron Extremis volcanic region. You’ll never be able to land in that.”

Matthew might have taken this as a challenge, but he knew the zeta-class shuttlepod was not designed for extreme weather. Soon, however, he’d command an Odyssey Project Aves — big as a transport, fast as an Interceptor, nimble as a Defender — could handle far worse. He looked out through the canopy again. Somewhere below that storm front was Midlothian, their city. “Why does our weather have to be so awful?” he wondered aloud.

She was only too happy to explain. “Republic has an eccentric orbit because the gravitational pull of Sapphire’s sun combined with that of the gas giant Colossus pulls us off center. As we orbit our sun, the planet tilts on its axis more by almost forty degrees. Because we’re in the extreme south, we get the worst of it in both seasons. We get the coldest, darkest winters, because we’re turned away when the planet’s farthest from the sun. When Republic is closest to the sun, our hemi-sphere is turned toward it, and we get heat and sunlight forty-four hours a day.” She had repeatedly explained this since she was seven years old. Matthew never quite got it, except that it made for horrid flying weather.

Midlothian was not only the southernmost but also the smallest Republic city-state, with barely 800,000 inhabitants. However, its importance to Republic belied the size of its population: Midlothian provided access to rich geothermal energy reserves, mineral wealth, and water and oxygen of the south polar ice cap, on which the huge megacities of the north depended. It also served as a safely remote location for Republic’s fusion generating plants. To protect the city from the extreme climate, it was built into a mountain range. Only transport tubes, and utility works lay outside the rock walls.

Matthew raised his com-link. “I’m going secure an alternate landing permit at ... City of Iron. We can wait out the storm there and fly in when it clears.”

“Matthew,” said Kayliegh, in her soft but certain voice, “We can’t put this off until tomorrow. We have to tell him.”

“This is not the kind of news you relay over an open communication channel.”

“Tomorrow, the Directorate will make the announcement,” Kayliegh argued. “He deserves better than finding out that way, or hearing it from a co-worker.”

Matthew turned to his sister, seeing a feminized version of his fine face and features. Her hair was lighter, and fell in curls past her neck while his almost black curls were clipped to a military trim, but her green-brown eyes were the same as his own. She looked hard back at him, always the one to do things the proper way, even when it was harder.

He sighed. “See if you can raise the Weather Station. That’s where father will be.”

She engaged the other com-link while Matthew plotted a course around the storm. The first two channels were blacked by interference, the third was at maximum capacity and taking no more traffic. Kayliegh hesitated for a moment, then accessed the Weather Directorate’s direct priority channel.

Calloway Driver was the Chief Administrator at Midlothian’s weather station. Although his city was small, the facilities it cared for were spread over 8,000,000 square kilometers of territory. Storms like this were a constant threat to the power stations and pipelines that criss-crossed his southwest quadrant.

When his face appeared on the communication screen, he was still holding a finger to the back of his jaw where the communication link was implanted in every Republicer. "Kayliegh, you can't use priority lines during a storm alert."

Matthew checked his instruments, and avoided the stern face of his father. Calloway Driver had been a proud man, once, and his careworn face was testimony to how years of exile in Midlothian had almost broken him.

"No choice, Pato," Kayliegh told him, using a Republic term of endearment. "It was the only way to get through to you."

He frowned. "Somewhere out in that toxic cyclone I have a sensor tower caked in frozen carbon dioxide; probably irreparable. So, I have a blind spot and scale 6 windshear cells developing in the vicinity of one of the Energy Ministry's precious geothermal rigs. It isn't that I don't what to talk, but the penalty for using this channel during a storm alert... I can't get sanctioned."

"I know," Kayliegh responded. "But this is very important."

Their father turned away from his storm model. "For both of you to break into a limited access channel... I should hope so."

Kayliegh spoke with some difficulty. "Father ... You know of the Odyssey Project."

Even Matthew could sense Calloway Driver's heart dropping. But their father's voice remained calm, precise. "We do get news even in Midlothian."

"We've been selected for Pathfinder Three. Matthew will be an Aves pilot. I'll be assigned to Geological Survey as a Climatology Specialist." She could see her father staring blankly at the screen, words having abandoned him. "It's a very important job," she added

"It's an important job here!" their father protested. "The whole planet depends on Midlothian for energy, for water, for the air they breathe. We need good climatologists"

"Father," Kayliegh said soothingly. "It's a great honor, and it's our duty..."

"Duty? Isn't that the word they always use when they order you to throw aside your own life and submit yourself to the service of the common good of the Great Republic, as defined, as always, by the Great Republic in her undeniable wisdom."

Matthew was busying himself with securing a landing authorization from the City of Iron aerospace port, but he bristled at the sound his father, railing against the Government, and on an emergency channel no less.

Kayliegh tried to soothe him. "This is a tribute to you, father, to the upbringing you and mother gave us."

"So, this is what the Great Republic demands now, families split apart, flung across the stars like ... like dust... like cosmic dust?"

"You know that isn't true. Families can go together."

"Not our family," Calloway Driver said, anger and defeat in his voice. "You know I can't go with you." Kayliegh had no answer, and Matthew and his father had never, in the course of their lives, discovered a place where words were easy to find between them. "I had always hoped you would come back to me, but I should have known better. No one stays in Midlothian unless they have to."

Matthew took a turn to speak. "We'll fly in as soon as the storm clears. We have twenty days leave before we report to training."

"Twenty days..." Calloway sounded completely defeated. "That is not a long time to say good-bye to your family." A small red notice appeared in their viewscreens. "I have an incoming priority message," Calloway Driver said. "Driver out."

The image of their father vanished, replaced with the shield of the Telecommunications Ministry done in the same style as the shield of the other 127 Ministries; an impressionistic rendering of heroic people marching bravely into the future, or in this case, telecommunicating bravely into the future.

Neither spoke until they saw the lights of the City of Iron appear on the horizon. Kayliegh touched Matthew's shoulder. "Was that as hard as you thought it would be?"

"It was hard, but now it's done."

"Not quite," she said. "I still have to tell him I'm getting married."

David Alkema
Joshua-Nation, Sapphire

From the top of the WatchTower, Cadet David Alkema could look out over all of the Odyssey Project Primary Training Complex. Sixty-four enormous, interconnected buildings hunkered beneath a giant dome, an assortment of cones, cylinders, and scalloped cubes and parallelograms typical of hyper-modern Republicker architecture. Beyond the dome stretched an ash-colored landscape of dull, eroded mountains and a debris field of large, cracking rocks. Even on rare cloudless days, the sky was gray. That was Republic, a drab planet for a drab people.

Cadet Alkema was often mistaken for the visiting little brother of some other cadet. His hair was dark and curly, his complexion ruddy, and his build athletic, but all scaled to the size of a young teenage boy. According to his biography, he was barely fifteen, the youngest age at which one could, with parental consent, train for Odyssey. He could easily pass for younger. When he had come through the reception hall, the adminicrat at the gate had checked his credentials four times before letting him pass. That had been a close call.

Odyssey training was a nonstop ordeal, memorizing a thousand different science and engineering formulae, mastering a few hundred ship systems, team-building exercises, and long missions to the desolate moons of the Republic system. As training progressed, reviews and examinations thinned the herd. Some of the Sapphirean cadets whispered that the reviews were skewed to wash out more Sapphireans than Republickers. Alkema did not know whether there was any truth to that, just that three-fifths of the cadets who had started with him had already washed out, that he was damn lucky to have gotten as far as he had, and that he had three months still to go.

"The WatchTower" was the penultimate hurdle. Every third night, Alkema took his place with forty other cadets in the double horseshoe of workstations designed to simulate the primary command center of a Pathfinder starship, and let an electronic vine of system interfaces grow across his cheek.

The WatchTower simulated what the mission designers expected to be a typical duty shift aboard a Pathfinder Ship. Shifts lasted seven hours and once each hour, maybe twice, an anomaly would creep into the system – an unidentified ship entering the control area, a failure in one of the ship's systems. It would only happen once or twice, and only one cadet could catch the error and receive credit for it. It was a test of stamina and attention span, and would strongly determine the likelihood that those cadets that had survived all the other ordeals would be assigned to a ship.

Tonight, they were monitoring simulated ship's operations. The previous shift, it had been flight control. A flight of four shuttlecraft... Aves, they were called ... had come back with five. Alkema had caught it first, challenged the extra ship, made the score.

That had been easy. Tonight, he had spent five hours watching numbers change on eight different ship system read-outs. Then he saw it. He touched the simulated com-link on his panel. "Pathfinder X control, Alkema here. I am reading a phase variance of 0.3 in anti-proton stream. Propulsion engineering confirm?"

He waited. It was a very small anomaly, just a hair outside system tolerances. Maybe it wasn't the test. Finally, a voice came back. "Specialist Alkema, Pathfinder X engineering propulsion confirming phase variance, compensating." His holographic screen showed the system returning to normal, and acknowledged that he had caught the night's anomaly.

He breathed a sigh of relief. The cadet at the next station, a female Republicker named Marriott looked at him. "Nine for nine. You know you're going to get a ship now."

Alkema could not tell whether she was failing to hide the bitter edge in her voice, or just intentionally being bitter.

"One more, and you'll have a perfect score," Marriott went on. "They may promote you straight to Tyro-Lieutenant."

Alkema knew he could get a perfect score, and knowing would have to be enough. A perfect score

would attract the kind of attention that might lead to him being on a shuttle back to Sapphire... or a detention cell.

Philip John Miller Redfire **Corvallis, Sapphire**

He told no one. The next day, or maybe the next, someone would call him on the com-link and be told simply that he had gone off-world, a satisfyingly mysterious exit.

He walked down Concordance Boulevard, intending to follow it to the river and cross the Remembrance Bridge to Joshua Island, where the graceful buildings of Planetary Governance, centuries and even millennia old, stood with quiet, erect dignity. He had seen them in the day, when they bustled with busy clerks and adminicrats serving out their brief terms of public service. Now, he would walk among them, with only the shadows for company, and see the soul of the city, without a million human masks to disguise it.

This was his ritual of benediction. He had come to know each of Sapphire's cities in this way, like studying the face of a lover as she slept. In New Cleveland and Kandor, there were people out on every street at all hours and music was continually playing. The streets of the industrial cities of Matthias, Hootch Grabr, and Sienna bustled with busy mechanoids and automechs, servicing the machines that hummed and throbbed in the daytime. New Sapporo's streets, in the Borealan winter, had been a place of silent frozen beauty, where the moons and stars glistened on black ice and pale blue snow. Corvallis at night was like a big library after closing time. Everything in it was well ordered, most of it was interesting, and he could not help feeling he was not supposed to be there.

He paused on the Remembrance Bridge to watch the Corvallis River pass underneath. On the South Bank, the towers of the Commerce Sector shined against the backdrop of the near-vertical, 10,000-meter face of the Wall of God mountains. Would he ever, he wondered, walk the streets of any city until dawn ever again? He looked up. Thought of worlds spinning around the stars above his head and tried to imagine their cities.

A shrill voice shattered his reverie. "Hoy, citizen!" He turned to see a woman wearing a gold jumpsuit, thigh-high leather boots, and a long cape. *Great, a cop.*

"Is it illegal to walk on the bridge?" he asked.

"Hoy, shiv out. I just wanted to make sure you're not a jumper," she yelled back. Sapphire was a largely crime-free planet. Cops were more like free-lance do-gooders,

"Do I look like a jumper," he asked.

She shrugged. "They look like everybody else." The cop studied him. Philip John Miller Redfire cut a lean figure in a black leather jacket and jeans. His red hair was cropped short, accenting his sharp cheekbones and soft jawline. The cop moved closer, and he raised his hands, showing black leather, fingerless gloves. "You're an artist?" she exclaimed.

"Za, a pyro-kineticist – not a jumper," he answered. "I blew up the Ur Building."

"I saw that one. That was you?"

He favored her with a slight bow. "Za, it didn't work out the way I wanted. My original proposal was to embed debris in the surrounding buildings, but they wouldn't let me use enough monohydrazine."

Her tone turned more cordial. "Are you planning to blow up the bridge?"

"Neg, I already blew up a bridge once ... in Matthias... part of a classical music concert... I'm just... saying good-bye."

The cop fondled her paralyzer. "Good-bye to what?"

"To Corvallis."

She gasped. "Hold! Are you going to blow up the city?"

He laughed. "Neg, my grant got turned down. I'm leaving tomorrow for Republic, and this is my way of saying good-bye. I take a long walk around the city at night, try to fix the memory of time and place in my mind, and ... connect with the spirit of the metropolis."

"That's so unique," said the cop, drawing her cape around her shoulders against the early morning

chill.

"So, officer, with your consent, I'm going to walk to the Plaza of The Thing and wait for the sun to come up."

She nodded and bade him Good Night. He continued his walk toward the capitol.

Eliza Jane Change

Somewhere in the Asteroid Belt of the Sapphire System

Eliza Jane Change had been sitting in the control couches of mining ships since before she could walk. Born on a Guild hospital frigate, she had never been outside a Mining ship or support facility. She had never breathed unprocessed air nor felt her weight in normal planetary gravity. The Guild had taken care of her when her mother died and given her a job as soon as she could reach the controls.

Change killed the ship's artificial gravity and closed her eyes. Moving a mining ship into position next to an asteroid was a delicate ballet in space involving a precise and exquisite balance of forces. The mining ship was huge, 2 000 meters across at its longest axis, the rock was larger still. She had instruments that gave her a three-dimensional understanding of the position and motion of both her ship and the rock, but she rarely needed them. When she closed her eyes, she could almost sense the gravity of the giant rock and feel the motion of both bodies. She touched her controls and felt the ship move into position.

"Entant-464, we show you in perfect alignment," came a transmission from the guidance team on the asteroid's surface. "Well done, Eliza Jane Change."

She ignored the compliment, opened her eyes, and stretched. The rock she had just parked next to had enough exploitable reserves of platinum, titanium, molybdenum, and manganese to keep the miners busy for months. She had earned her salary for the period. This was the life of a guild pilot. A few minutes of intense concentration followed by months of boredom.

As she finished locking the controls, the rear hatch slid open and Mining Chief Do floated in. "How's your status, Eliza Jane Change?"

"All is normal. We're locked in orbit at LaGrange V. I'm getting ready to calculate compensatory thruster burns to keep us in position."

Do waved her off. He was a heavy man, with a curly-black beard and a face pock-marked from too many accidents involving explosive decompression. When gravity was disengaged, he didn't wear his prosthetic legs, and Change was accustomed to seeing his legless torso floating through the corridors of the ship. "I didn't come up here for a position report. I came up to see if you had decided to accept the Guild's offer."

"I made my decision a long time ago. I am staying here."

The MC pulled himself up by the OhShit handles on the cockpit wall. "If you refuse, you may find yourself on the slag line in the belly of an ore-processing ship."

Change's voice grew sharp and flinty. "I don't understand why they are trying to get rid of me. I'm their best pilot."

"The Guild doesn't need great pilots. Good ones are good enough and less expensive to the pension plan." He took a swig from a blue-metal flask. "Eliza, girl, I have known you since you were a child... since before your father disappeared and your mother died. Do you know what awaits you if you stay with the Guild?" He jerked a finger at the forward monitor. "You spend ten, twenty, thirty years putting ships into orbit around rocks in space. One day your thrusters fail or you miscalculate, and you and the ship end up as part of the rock. Even if you should live to be as old as me, you will squander your youth and vitality wrenching metal from rock, and that, Eliza Jane, is far less than you can achieve. All the time you work, the fruit of your labor goes to the Guild. The committee members live well in their beautiful homes and send you a box of cookies at Sidereal New Year."

"You think I would be happier on a ship with 7,000 groundlings?"

"I am telling you that whether you stay or you go, your life won't be as you planned it. The Guild never forgets or forgives an act of defiance." The MC looked out through the tiny viewing port into space. With that, he shoved off from the wall, and let himself out through the hatch.

Eliza Change closed her eyes. Much as she hated to admit it, the MC was right. She had no future in

the Guild Not anymore, and nothing could alter it. Whatever future she had lay *out there*.

Goneril Lear

City of Alexander, Republic

Lt. Commander Goneril Lear took a vertical transporter to the 503rd level of the Ministry of Defense Space Command Edifice. The lift had transparent walls and slid up the exterior side of the building. Sunlight dazzled through the perpetual mist that shrouded the City of Alexander, making the sky shimmer over the huge, interconnected buildings in which forty million citizens lived and worked.

The transporter opened onto a broad internal corridor. Goneril Lear walked into the busying herd of uniformed people. She was a short woman with the finely drawn features, pale gray eyes and nearly white blond hair typical of Republic women of a certain age. The slant of her chin and her purposeful stride left no doubt that although she walked among the clerks and officers of the Ministry, she did not consider herself one of them. She was, after all, a Lear, a Senior Liaison Officer and Command Designate, for her, people below the rank of Chief Administrator did not exist unless she required them to. She approached the office of Acantha Dassault, Executive Administrator for the Republic half of the Odyssey Project, already knowing what the Executive Administrator was going to tell her. Lear touched the Reception Panel. "Goneril Lear," she said. The door slid open.

"Come in, Lt. Commander Lear. Let's sit down and talk, shall we?" The Executive Administrator smiled pleasantly, emerging from behind a desk that looked like a large oblong plastic slab suspended in mid-air. (Lear guessed it supports must have been non-reflective composite. Even an Executive Administrator would not have warranted the extravagance of a localized anti-gravity field).

With a grace that was almost grandmotherly, the Administrator took Lear by the arm and escorted her to a white-cushioned chair of sharp and square design that nestled in an alcove of her office suite with another chair. The two seats were arranged before a huge perfectly round window that looked out over the vast cityscape. "As you know, the Odyssey Project originally called for the construction of twelve ships" she began. "You were to command Pathfinder Eleven. However, the mission has been redefined, and it is now believed that nine ships will suffice for Phase 1."

"I heard news to that effect some days ago, but I was unaware that a final decision had been made."

"It has, and I regret that there is no longer an opportunity for you to command, the other commanders having all been confirmed. The Odyssey Project can only offer you the position of first officer on Pathfinder 3 or Pathfinder 6."

Lear nodded. She had mentally prepared herself for this moment, but she could not help feeling betrayed when it was confirmed, one-to-one, in its finality. "If I turn down the first officer positions, would I be in line for a Phase II command position?"

"You would be past mandatory retirement age by the time Phase II is ready, unless you choose to go into stasis and..."

"I have a family. Stasis is not an option."

"I regret that it is the only option I can offer you."

"Or, I could remain here."

The Executive Administrator spoke again, still sounding grandmotherly, but this time like the grandmother who hadn't survived the rough-and-tumble politics of the Space Ministry by handing out cookies. "We need our people on those ships, in command positions, or ready to take command should the need arise. There have already been security breaches on Pathfinders 2 and 3. Nine days ago, we arrested four Sapphirean Isolationists who were trying to gain access to Pathfinder Three's fusion core." She paused. "Needless to say, that information does not leave this chamber."

Lear nodded. "Of course, Senior Commander." For a moment, neither of them spoke. Outside, an air-limo plowed through the mist, stirring the clouds from which only the tallest towers of the city protruded. Lear wondered what Minister or Executive might be inside.

"Look at that, Goneril" the Administrator said. "A city of forty million, and two hundred forty more like it across the surface of our planet. Our ancestors would be proud, don't you think, of the civilization we've built on this forbidding world, through strength, discipline, and necessary sacrifices for the greater

good.”

Lear looked up in surprise. She could not have imagined the Executive Administrator addressing even her own husband by his first name.

She was not yet finished. “I have been preparing you for the last fifteen years to command a Pathfinder Ship, not a Ministry, or a HomeGuard Base, or a diplomatic mission, and I am well aware you could have any of those if you wanted it. Your duty is to go where you are needed, and you are needed on a Pathfinder Ship.”

“I would never have seriously considered the option of remaining behind,” Lear told her.

The Executive Administrator seemed pleased. “Good, very good.” She stood. Lear stood. The meeting was over and Lear knew, it was time to find the door.

“Just one thing, dear,” the Administrator called out, just before Lear exited. “When we discuss your position with the Odyssey Directorate, do not surrender your bargaining chip so easily. Let them think you will leave the program if you aren’t given the right ship, and the right range of authority. Do this, and I will make sure that you get exactly what we need.”

William Randolph Keeler New Cleveland, Sapphire

The University of Sapphire at New Cleveland’s Grace Auditorium seated six hundred. Its transparent walls looked out on the quad-range. On this, a brilliant spring day in September when the girls in the quad were wearing shorts and the boys were shirtless, or vice-versa, being indoors was almost too much to bear and the lecturer knew he was up against both cabin fever *and* adolescent hormones.

Chancellor William Keeler was a substantial man, well-fed and large-framed, with a full head of steely gray hair and a round face that wore an expression of perpetual self-satisfaction. He was 52 Sapphirean Years old, at the prime of his professional life. Middle age was still twenty or more years in the distance, the foolishness of youth a pleasant memory. When he was ready to speak, he tapped a long, ceremonial staff against the side of the lectern.

“Good afterdawn, everyone. Before we begin, I have an announcement. The orgy with the gymnastics team has been moved back to next Firesday owing to a delay in the delivery of cinnamon oil...” Keeler paused and looked up from his notes.

“I’m sorry, class,” he said to the suddenly silent lecture hall. “Those were my notes for the faculty meeting this afternoon. It appears that you are here for Colonial History 101. So be it.” He made a gesture to the teaching assistant who ran the holographic projectors.

“Your knowledge of our planet’s history probably begins with the discovery and survey of this world by the starship *Carpentaria*.” Images formed over his head of an ancient star-faring vessel entering orbit over the familiar blue and green sphere of the planet Sapphire. “However, for purposes of this course, the history of Sapphire begins on the planet Earth. Now, you have probably been taught very little about our mother planet. There is a simple explanation for that. Very little is known and what think we know, is highly suspect.

“To understand why this is, one must first understand the lengths of time with which we are dealing. Our Sapphirean civilization is, roughly 3,000 years old, and we’ve spent nearly half that time on our own. Nevertheless, our language, our concepts of art, science, and religion were all handed to us from Earth. Sure, we have devised our own unique innovations, our own flavors, but the foundations for all we have were laid out thousands of years ago on a world on the other side of the galaxy, about which we know almost nothing.”

He gestured to the holographic projections of a blue planet with a large question symbol superimposed over it. “We have no maps of Mother Earth. However, the accounts of the *Carpentaria*’s survey party suggest that it was much like Sapphire. The young Survey Secretary of the *Carpentaria*’s crew — a man named Joshua Nation, who became the first Colonial Governor-General — makes repeated mention of the mildness of Sapphire’s climate and notes the presence of only one significant desert region. From this, we may conclude that the climate of Earth was somewhat harsher than ours, and that there

were several, perhaps many, desert regions. Joshua Nation's log also notes that the continental landmasses are similar in size and landmass-to-ocean ratio to the Earth's. The timeline on the log suggests Earth's year was longer than ours by forty to forty-eight days.

"Our colonial period began in the last part of a period known as the 'Great Seeding,' or the 'Great Diaspora.' Wasn't everything humanity did in those days, 'great'? Earth and the Inner Colonies explored the galaxy and established thousands of colonies, forming the Human Galactic Commonwealth." His projection displayed spaceships zooming back and forth among the stars.

"The Great Seeding continued for over two thousand years, and then abruptly stopped, which began the current 'great' epoch of human history, the Great Silence. The Great Silence is said to have begun about twelve hundred years ago with the departure from our orbit of the last starship to pay a call on Sapphire, the *St. Beryl*. In the centuries since, no other ship has called on our system, and the galactic communication network has been silent for almost that long."

Outside in the Quad, a game of Inverted Wally Ball was commencing. He would have to pick up the pace. Once the players began levitating, all bets were off. "So, What happened to the rest of humanity? Many believe that the human empire was destroyed in war with a Superior Alien Species. One reason this theory is so widely accepted is because it is 'known'..." he put finger-quotes around the word, "...that coincidentally with the beginning of the Great Silence, humanity encountered such a highly advanced alien species. They were called the 'Tarmigans.'"

"Did your parents ever tell you, 'If you don't finish your ground-nuts, the Tarmigans will get you?' The Tarmigans were *supposedly* an advanced race encountered in the course of our expansion in the gal-axy. Some believe the Tarmigans conquered the Commonwealth, and the greater part of humanity was annihilated, reduced to a primitive state, or put into slavery." The tone of Chancellor Keeler's voice indicated he did not believe it himself, and no student in his class should either if he knew what was good for him.

"This is a theoretical possibility. But, there is not nearly enough proof that the Tarmigans even existed, let alone wiped out human galactic civilization. In any case, if such a race did conquer Earth and the Inner Colonies, one would expect some word to have gotten back to us, unless every other colony had fallen simultaneously. Quite apart from the logistical demands of executing a swift and coordinated conquest across many light years, why should every other world have been conquered save for Sapphire and Republic? It seems awfully incompetent for an alien master race to have overlooked us."

He looked out to the Quad again. The Wally Ball Game had become co-ed shirts versus skins. Four balls were in play now. Damb! If *he* was distracted, this was not good. He signaled to his assistant to jump ahead. The top of the room became an animated diorama of bug-eyed, horned aliens over-running screaming human colonists. "A variation of the Conquest of Humanity Theory has the Earth at war with an equally matched species, such as the Theans, or the Garr, a conflict that eventually leads to the collapse of both civilizations. Of course, we haven't heard from the Theans or the Garr, either. Perhaps, the Tarmigans got them as well.

"Any theory explaining the Great Silence must account for how the disaster could be both simultaneous and complete across all, or almost all, human galactic civilization. The key point to remember here is that simultaneous does not mean instantaneous."

Keeler stepped away from the podium and made a discreet gesture to turn off the projectors. He put on a thoughtful expression and said, "Now, I am going to tell you the disappointing truth of what most likely was the case."

With the attention of most of his students fixed on him, rather than the hologram, he explained. "One would expect a sudden loss of contact with the rest of human civilization to have been of great concern to people living here at the time. Yet, in what remains of the records of the era, very little is written or said about it. In fact, the term 'The Great Silence' was not used until nearly four hundred years after the *St. Beryl* left orbit.

"This suggests that the loss of contact was not, in fact, sudden and total. Indeed, records indicate that, prior to the departure of the *St. Beryl*, it had been six years since a ship from another star system had made orbit here. The flow of starship, and communication traffic to this system had, over the centuries, slowed to almost nothing.

"Transporting people and goods between stars is an enormous undertaking. Space is vast, perhaps infinite. If our sun were a grain of sand, and all the stars were to the same scale, the sun of Republic would be almost a hundred meters away. On average, all the stars in our galaxy would be 10 kilometers apart, stars with inhabitable planets, 200 kilometers apart. It requires vast amounts of energy to move that much mass, that much distance.

"At the same time, the objective of each human colony was to attain self-sufficiency. Given a choice between directing limited resources toward attaining self-sufficiency or maintaining contact with distant, it is logical that most colonies would have chosen self-sufficiency. That is, after all, the choice that we made, and there's no reason to believe any other colony was any smarter than we were."

"Presuming self-sufficiency was even the smartest response," Keeler heard a student mutter. He perked up. One bright kid could make a whole term worthwhile.

Keeler continued, directing his comments at the boy in the third row, the mutterer. "As each colony moved toward self-sufficiency, inter-stellar travel would have diminished. This is consistent with what happened here. When we were founded, Sapphire traded agricultural goods, arts, and entertainment to Republic for chemicals and minerals. Over time, however, as each colony became self-sufficient, contact went into decline and eventually ceased, only being restored in the last three hundred years, when we had advanced enough to afford the luxury of interplanetary contact.

"And that, I am almost sorry to say, is most likely what happened across the galaxy. This is what I call the 'They-Just-Forgot-About-Us' Theory. If I am right, there are hundreds if not thousands of human civilizations carrying on with no knowledge of us."

He sighed. "This theory is also flawed, of course. It does not explain why Earth or the highly advanced Inner Colonies should have broken off contact with us. Yet in the absence of proof to the contrary, the prudent historian will prefer non-catastrophic explanations."

"Sophistry," He heard the boy muttering into his recorder.

Keeler grinned. "I was going to dismiss class early, but since that gentleman-scholar in the third row has expressed skepticism with my theory. I think it fair to give him a forum. Stand up please, Mr...?"

"Terminax, Sloane Terminax," said the boy, standing. He was thin, with stringy dishwater blond hair, and too-large lips for his thin face. "I have two problems with your theory."

"Only two," Keeler answered, arousing an amused twittering.

"First, you say that self-sufficiency of each colony caused the Great Silence, but it could just easily go the other way around. The Commonwealth fell, for whatever reason, and only the self-sufficient colonies ... like ours... survived."

"I believe self-sufficiency was the only practical choice."

"That's a Sapphirean perspective," the boy argued. "But after the Disintegration, Sapphire went into centuries of decline. Republic fell into planetary war. We were better off before the collapse when we were part of a galactic community."

Keeler argued right back, enjoying the challenge. "Only one star-system in tens of thousands contained a habitable planet. The proximity of Sapphire and Republic is a cosmic fluke. Even to Republic, by our fastest liner, near light-speed, nearly five weeks. To another star... years. How can you have a 'community' when it takes years to reach your nearest neighbor?"

The boy persisted. "What about the communication net? Your thesis is it fell into disuse as colonies became self-sufficient, but colonies surely would have wanted to share news of their advances and their social progress with one another."

Keeler sighed. The kid had a point, not that he was willing to concede it. "A Tachyon Pulse Antenna is a thousand kilometers across and difficult to maintain. When Sapphire went through its Dark Age and technological retreat, our TPA drifted off into space. We only rebuilt it within the last three hundred years."

"But there were thousands of colonies!" the boy protested.

"Of course..." Keeler said, gently gesturing him down. "And that's why the Great Silence remains such an intriguing mystery. Now, does anyone else want to play 'Match Wits with the Professor.' If not,

then that's all I have today. I'm sure you've got better things to do then absorb knowledge from me. If you have more questions see me during my office hours, or just suffer in ignorance. Class dismissed."

On his way out he noted to his teaching assistant. "Make a note of Mr. Terminax's arguing with his sage professor. There is no way I'm letting that kid get any grade less than Double Alpha this term."

"A message came while you were lecturing," said the teaching assistant, a former Republicer named Herodotus Xerox, exiled from his homeworld after a humiliating, but highly entertaining, scandal involving 'whorebots.' He handed the message to Keeler, who read it and frowned.

"There's been an accident at Odyssey Project."

"Oh, dear," said Xerox. "Was anyone hurt?"

"Just the commanding officer of Pathfinder Ship *Pegasus*."

"How awful."

"It's worse than that," Keeler said grimly. "They want me to take over for the poor bastard. They must really be desperate to get me off this planet."

chapter one

The Republic Outsystem

Titus (All-Environment Excursion Vehicle P3-021, Aves-class) streaked through the outskirts of the Republic system, maintaining course for the Pathfinder ship *Pegasus* .

Its pilot watched a virtual display of the ship passing into the controlled space of the Odyssey Project Shipyards. When it had passed through, he addressed his single passenger, seated behind him on the command deck. "We're approaching the outer perimeter of *Pegasus's* artificial gravity field." It was a standard spiel, required by Republic Ministries of Transport, Public Safety, Space Travel, and Human Health. "You may soon experience disorientation and other effects related to entering into the gravitational influence of the pathfinder ship. If you experience discomfort, the standard recommendation is to close your eyes and relax until the feeling passes."

Pegasus's commander looked up from the science report he was reviewing, "This is not my first docking, lieutenant."

The pilot answered, "Aye, sir." Then, turned his attention to the necessary communications with Flight Control.

"*Pegasus* Flight Control to Aves *Titus*. We show you thirteen seconds inside the outer marker, closing at .15c. Confirm?"

"*Titus* confirms closing at .15c, 20 seconds inside the outer marker."

"*Pegasus* Flight Control orders *Titus* to reduce to docking speed and stand by for approach vector."

"*Titus* acknowledges."

The Aves pitched slightly forward and down like a bob-sled making an easy turn as it encountered an intersection between two overlapping directed gravitational fields. *Pegasus* was the size of a small city, but in open space, it generated multiple short-range pseudo-gravitational fields, some as strong as a planet. Navigation among them was always at least a mild challenge to the pilot.

Titus slid along the inner margin of one gravitational field, still outside visual range of *Pegasus*. *Titus's* pilot fired braking thrusters. There was another sharp lurch as *Titus* bumped off a gravitational field, throwing its occupants against their safety harnesses.

"Steady as she goes, Lieutenant." Prime Commander St. Lawrence wondered if this pilot's landings were always so rough.

"*Titus* to *Pegasus* Flight Control. *Titus* has encountered a gravitic discontinuity. My instruments did

not indicate any GD advisory. Can you confirm?" If the Aves was off-course, he might be encountering the edge of a gravity field outside the normal flight path.

Before *Pegasus* could answer, *Titus* smacked hard into some invisible wall, suddenly bucking upward and back, snapping its two occupants hard against their seats.

The pilot reached for his controls. All around him, a bank of read-outs that had been calmly glowing blue and green erupted into red and orange flashings as alarms began to wail. Something slammed into the starboard wing-blade. Before the pilot could react, *Titus* was ripped into pieces. There was a small explosion as the main cabin opened into space, then a larger one when the fuel cells tore apart.

The Republic Out-System

Another pilot, another passenger, and another Aves were making the run across the same stretch of space.

In the back of the command deck was one William Randolph Keeler, who sat with his legs up on the aft navigator's station, gin and tonic in one hand, a copy of *Significant Galactic Archaeological Finds of the Colonial Era* in the other. The pilot of this Aves, Flight Lt. Matthew Driver, gave no thought to the fate of the last ship to make this run. "You might want to secure yourself, sir. When we enter into *Pegasus's* gravity well, it can be disorienting. The standard recommendation is to secure yourself in and close your eyes."

Keeler nodded, set his book aside, and drained the last of his beverage. Then, he rose from his seat and leaned over Flight Lieutenant Driver's chair, catching the last of a conversation between the pilot and Flight Control.

"*Pegasus* Flight Control to Aves *Prudence*. We show you thirteen seconds inside the outer marker, closing at .15c. Confirm?"

"*Prudence* confirms closing at .15c, 20 seconds inside the outer marker."

"*Pegasus* Flight Control orders *Prudence* to reduce to docking speed and stand by for approach vector."

"*Prudence* acknowledges."

"Hoy," said Keeler brightly, tapping the side of the command chair with his walking stick.

Driver bristled. "Sir, I would recommend that you remain seated during the approach..." The young pilot offered Keeler the seat next to him. Keeler declined, choosing to kneel on one knee behind him, which he sensed gave the young man some further discomfort. Still, how much worse could it be than the flight interface, that reef of bright obsidian plastic that seemed to grow out of the cheek and jaw of the young man. He wondered if it hurt. He wondered what it felt like to be plugged into a machine that way. He should build up to it before asking, he decided. "What is your name, lieutenant?"

"Flight Lieutenant Driver, Matthew Driver, sir."

"Where are you from, Flight Lieutenant Driver Matthew Driver?"

"Midlothian settlement ... Republic, sir."

Keeler gave him a friendly tap on the shoulder with his walking stick. "Driver... I took that for a Sapphorean name."

"My great-grandparents emigrated from Sapphire."

"Good God, man! Why?" Keeler exclaimed. "Did they abhor sunlight, fresh air, and deciding things for themselves, or did they just want to live in a cube of a three-hundred story tower micromanaged by adminicrats?"

The piloted fidgeted uncomfortably. "They were democratists."

Keeler held up a hand. "Enough said." Some centuries earlier, when Sapphire and Republic regained contact, the democratists had sought to replace Sapphire's system of Government – which consisted mainly of picking people at random for single five-year terms to serve in the planetary legislature, called "The Thing" – with an electoral democracy like Republic's. They were never numerous, and, when space travel became practical again, hundreds emigrated to Republic. One of Keeler's ancestors had had most of the rest shot. "Is Midlothian a nice place?"

"Midlothian is in the antarctic region of Republic, built into the side of a mountain range. The air

turns to liquid in the winter."

"Most people don't like that. Lieutenant,... May I call you Matt?" His pause was not sufficient to give the pilot time to respond. "Za, of course I can. I'm the Captain... I can do whatever damn well pleases me. I was only trying to make conversation. I intend to command *Pegasus* just the way I ran my University. My students always knew where I stood and knew they could approach me. I intend to have that same rapport with the crew of this ship."

"I understand, sir. I am just trying to concentrate on delivering you safely to your command." He ran a final system status review. Just his luck, everything was fine.

Keeler sighed. The pilot of the liner that had transported him from his homeworld to the Odyssey Station on Colossus IV had not been conversationally gifted either, and that journey had been a three-week trip. Granted, relativistic speed had made it seem like three days, but Keeler had spent his whole life in New Cleveland, the very capital of Sapphire in every sense except the governmental one. Spending three days without an opportunity to skewer the pompous, self-satisfied twits that made up most of his faculty was like being deprived of air. He had hoped commanding a ship on which half the personnel were Republickers would provide a range of new targets for his sharp wit and eccentric behavior. But so far, the Republickers attached to the Odyssey Project had not proved very sporting.

"*Pegasus* Flight Control to Aves *Prudence*. Slow to docking speed. Come about 32 degrees and adjust positive 620 meters vertical."

"*Prudence* acknowledges," he turned to his commander. "I have visual on *Pegasus*," Driver announced.

Keeler turned to the forward monitor. At the edge of their field of view, a tiny pale star was becoming larger, eventually resolving into a magnificent double diamond of light, and crystal, and gold. As the full shape and details of the ship became clear, Keeler could make out transport and cargo shuttles flitting around her like a swarm of lightflies while a small squadron of construction pods applied the finishing touches to the hull.

They came at her head on, nose-to-nose. The forepart of *Pegasus* was like the prows of two ocean-going vessels, sandwiched one atop the other and fronted with a huge shield in which was inlaid a design of wings and stars. Just as *Prudence* reached the bowsprit, she lifted up to flash over the four-and-a-half kilometers long dorsal plane of the ship; a mosquito buzzing past a swan.

Driver banked his ship, and showed Keeler what he would soon be commanding. First came the domes and heavy hatches that covered the main body of weaponry; the missile hatcheries that made *Pegasus* as deadly as she was beautiful. Then came a long expanse of metal and crystal that connected the forward to the aft like the shapely neck of a swan. The hull widened where the habitation levels began, protected from space by millistrati ultracrystal stronger than diamond. Within, Keeler could see flashes of gardens and architecture, as well as transport pods moving on the intraship tubeways.

They reached the rear of the ship, and Driver guided his Aves between the command towers. Nearly a thousand meters high, they narrowed as they rose, adorned with sculptures of humans reaching toward the stars. They curved upward, bending toward each other as though to whisper secrets. Almost despite himself, Keeler was impressed. Humanity was returning to the stars in style.

Flight Lt. Driver cut his speed again as the Aves flashed over the ship's backside. In the space beyond, Keeler could pick out the distant space docks where two other ships of Project Odyssey, *Republic* and *Sapphire*, were being constructed. The Aves arced around behind *Pegasus* and began its approach to the landing bays, whose hatches lined her stern.

"*Prudence* announces final approach to Landing Bay 23-Alpha. Confirm beacon and lock."

"*Pegasus* flight control to Aves *Prudence*, you are cleared for docking."

Keeler leaned over him. "I'd like to see the bottom of the ship."

"The Underside?" Keeler figured him to be the kind who hated it when plans were changed at the last minute. Most pilots were.

"Za, think of it as an inspection. I would never buy a house without looking at the basement."

The pilot obliged. "*Pegasus* Flight Control, *Prudence* requests clearance for another go-around. Transmitting vector."

There was a pause, then "Is everything all right, *Prudence*?"

"Affirmative, Flight Control. All systems optimal."

"You are cleared, *Prudence*. Transmitting new approach vector."

The Aves executed a sweet pirouette in space, dipped, and came in just between the twin, teardrop-shaped lobes of the two great under-hulls. The underside was not brightly lit, but did glow faintly from the energy within. Keeler could see the skin of the hull here was not smooth, but a kind of bas-relief. Between the two primary under-hulls nestled a smaller, shallow one. Emerging from the after-hulls were two great curving, segmented structures, that put Keeler in mind of bones, of vertebrae. These connected the aft of the ship to the forepart, where the prow jutted forth proudly, determinedly.

Keeler found himself without words, a rare occasion indeed. Here was this great ship, the highest achievement of his civilization, a vessel to knit the space between stars. How had he been chosen to command this thing? What were they thinking?

The pilot maneuvered the Aves over the topside again, this time in a long shallow bank over the starboard blade. He spoke again as they cleared the fantail. "Another pass, commander?"

"Neg, take her in."

"*Prudence* to *Pegasus* Flight Control, commencing final approach."

There was a row of huge hatches on the stern of the ship that guarded the landing bays. Keeler put his hand on the pilot's shoulder as he angled his ship toward the hatch that was drawing upward. "So, do you mind if I ask you about that thing on your face ...?"

Reception Area – *Pegasus*

When Keeler entered the reception area off Landing Bay Alpha, a blond woman close to his own age stepped smartly forward and saluted him. She was slight in build but carried herself with an air of crisp authority. "Prime Commander, I am Executive Tyro Commander Goneril Lear, your first officer. It gives me great pleasure to officially turn over command of the Pathfinder Ship *Pegasus* to you, effective immediately. Welcome aboard, sir."

The sight of two score senior officers and section chiefs assembled in full dress uniform filled him with the urge to say a few words. Keeler knew that the prospect of giving a speech would be bothersome to some people, but he could not for the life of him fathom why. In his profession, he had grown to appreciate nothing more than a captive audience obligated to listen politely to whatever he cared to say.

"Thank you, Executive Tyro Commander Lear. When I was a boy, my mother, an astro-cartographer, used to take me walking along the lakeshore at night. She would point to this star, or that one, and tell me there was a world spinning around it on which people just like us lived. It always made me wonder if there were, on those worlds, other people pointing back at me. As I grew older, I began to wonder if there really were people left by those stars, or whether it was only on our two worlds that the torch of human civilization still burned.

"There may be thousands of human colonies out there. Finding them, bringing them back into the family of humankind: that, ladies and gentlemen, is our real mission.

"What awaits us? Answers. Questions. Wonders. Horrors. Humans so changed we may not recognize them as our own kindred. Worlds with stories, cultures, languages, philosophies that we could not, in our most fevered dreams, imagine.

"And so forth we go, as explorers, as missionaries, as messengers, and as inheritors of the human spirit, keepers of the human flame. That spirit brought our ancestors from their ancient worlds to these new ones. That spirit, our birthright, built two great civilizations and one magnificent alliance. If – or, as I fervently hope and believe, when – we encounter other humans and other worlds, we shall speak proudly of what our race has accomplished here, on the worlds originally designated as 11 527 Pegasi four and 11 606 Pegasi two.

"I, for one, can hardly wait to begin. We have a fine ship, an excellent crew. Fear no evil. God is near. Thank you."

After the applause had died down, one of the ship's Holy Women, an Iestan, came forward to offer a short prayer of blessing. "Brothers, Sisters, let us open hands and hearts to the blessings of the Eternal,

who contains the Infinite. May this journey we are about to begin enlighten and purify us as the passage of Your Daughter Vesta through the wilderness. Pray that we may receive knowledge as did she. Pray that we may find on this journey the opportunity to demonstrate ourselves as worthy of the blessing the Eternal has bestowed upon us. In the name of the Son, and the Daughter, Amen."

"This is amazing," Keeler said when she was finished, examining the front wall of the Reception Area. "That portal creates the illusion of looking all the way to the front of the ship, through every section. Yet, instead of a jumble of decks and bulkheads, it all seems coherent. I can focus on a single section at a time."

"Perspective Perspex," Lear explained. "Developed at your university by a Dr. Nachtmacher unless I am mistaken."

Keeler snapped his fingers. "Za, Doctor Nachtmacher, of course. I had to dismiss him after he tried to use it to peer into the showers at the Athletic Complex."

She bristled, the rest of the room chuckled politely. Keeler stepped down from the podium and began working the crowd.

Hangar Bay – Pegasus

While the new commanding officer met his officers, Technician 3rd Class Eddie Roebuck was removing Keeler's personal bags from *Prudence's* cargo bay. He was lifting a large, hexagonal crate and almost dropped it when a voice came from inside. "Hoy, watch it. You want me to lose my lunch!"

Roebuck bent over and peered into the vision slot at the end of the box. A pair of angry green eyes glowered back at him.

"Roebuck," called the other technician assigned to his team. Horatio Halliburton was perhaps thirty Republic years old, rather thickly built, with a habit of hanging his lower jaw slightly, a posture that made him seem dull-witted. Roebuck walked to the rear of the Aves just slowly enough to annoy Halliburton without actually setting him off.

"Do you have any idea what this is?" Halliburton indicated an oblong, glossy black casket with the crest of the planet Sapphire – four flags, representing each of the four continents, arrayed around a triangle, a landscape of mountains, ocean, and three crescent moons within - picked out in silver on its surface.

"Screws me. A container, I guess."

"Oh, brilliant. Crown jewel of Sapphirean educational techniques, you are," Halliburton said. From someone quicker, the comment might have seemed biting. "This is routed to the Prime Commander's quarters. Inspection protocol overridden."

"Krishna! Must be something heli* impressive in there."

"It's none of our business," Halliburton sniffed. "Get a transport pod, move it with the other items." He reached for the container Eddie had just set down. Eddie was about to warn him when he let out a yelp and jerked his hand away, blood dripping from four slash-marks on his fingertips.

Primary Command Deck

After Keeler had finished working the reception, meeting his command staff in a blur of Republic handshakes and Sapphirean back-slaps, Lear and Keeler left the reception and exited to the adjacent dock, where a transport pod, a small vehicle shaped like an egg with a flattened bottom, awaited. She commanded the vehicle to take them to the Primary Command Center.

"You mean the Main Bridge?" Keeler asked.

"Some crew members call it that. I prefer Primary Command 1, or PC-1 for brevity." The pod glided forward, and nosed into the Intra-ship tubeway for the short climb to Deck 100, Section Alpha.

They exited at the transport dock. A pair of large, heavy hatches slid aside, and showed them the Command Center. There was a crystalline dome overhead, looking out to the stars. Twenty people or so occupied stations along the outer bridge, which wrapped around the inner bridge in a parabolic curve. The walls were white, inlaid with different kinds of instruments in black panels and displays trimmed in navy blue, the floor was dark gray carpet. The seats for each station were large and suede gray. All in all,

Keeler decided, not a bad place to work, albeit a little subdued for his tastes.

A tall thin officer with Tyro Commander's stripes on his red-trimmed jacket interrupted. He wore fingerless leather gloves, the kind Master Artists wore on Sapphire. The lanky lieutenant lay his hand on Keeler's shoulder in the standard Sapphorean greeting. "Tyro Commander Philip John Miller Redfire, Officer of the Watch. Welcome to Main Bridge, Prime Commander."

Keeler laid his hands on his officer's shoulder. "I remember you Redfire. Spring Term, 7285, you and a group of students occupied my office and used my ceremonial robes to wipe your bottom."

Redfire smiled. "I'm glad you remember."

"I remember everyone who does that."

"So, how does a University Chancellor find himself in command of a starship?"

Keeler sighed. "One can only refuse so many times before concluding that the Odyssey Project is not going to take a hint. How did you end up here?"

"I applied for the program, I was selected, and, on the basis of my degree, they put me in weapons training."

"Za, I remember. Master's in Pyrotechnic Art. Class of 7286. For your Master's Thesis, you wanted to blow up my ancestral estate."

"I was motivated by art, not hostility."

"No doubt, but I was impressed by the simulation you did construct. The image of me running outside in my bunnybeast slippers with my mistress while the House Proper collapsed in flames was especially inventive. Casting Professor Starcross of the Erotic Arts faculty as my mistress was even more inventive."

"That's not what I heard."

"Gentlemen," Lear interrupted. "Perhaps you two would like to reminisce after the tour of the Command Tower?"

"Of course," Keeler said. "Tyro Commander Redfire, show me the ship's weaponry."

Redfire crossed to a tactical station on the perimeter of the bridge and brought up a display. "With this ship's weapons, we should be able to broast anything that looks at us the wrong way. Last week, I carved my initials in an asteroid."

"You're lucky the Mining Guild didn't file a protest."

Redifre grinned. "Every day is like Solstice Day, and I've been a very good boy. The directed energy weapons are supplemented by Hammerhead and Jackhammer missiles, as well as Aves and Accipiters."

"Accipiters?" Keeler asked.

Redfire brought up a schematic of what looked like a vicious metal butterfly. "Accipiters are multi-purpose tactical craft, they can carry one pilot, or operate autonomously or by remote control."

"The ship that brought me here carried those the tip of each wing," Keeler said.

"Some personnel call them 'Shrieks' for short. The Accipiters supplement the Aves' capabilities for reconnaissance, strike, and point defense. And, at the top of the line, we have these." He brought up a schematic of a craft that looked like a small, slender Aves with its wingblades clipped. Contained within, twelve coffin-shaped projectiles. "The Nemesis Mark V Anti-Matter Missile and Variable Yield Warheads, affectionately known as the 'Big Dam.'"

"Big Dam?"

"Developed under the 'Big Damage' Advanced Offensive Weapons Project. The smaller yields can vaporize cities, shatter whole ecosystems. At maximum yield, you can smash an entire planet to dust. The Reps really didn't want us to have them."

"I can understand that, why would we need to blow up a planet?"

"We don't know what's out there, Prime Commander."

"The weapons systems are certainly interesting," Lear interrupted, het tone suggesting otherwise. "However, there's much more to this ship than guns and warheads. This way, Prime Commander."

Keeler proceeded on his survey, pausing over another station. "You look busy, crewman. What's

going on here?"

The Specialist at the station was a dark skinned woman with close-cropped blonde hair. She introduced herself. "Specialist Shayne American. I'm trying to isolate a problem in waste reclamation."

"What happened?"

She shrugged. "Nothing serious. It shut itself down for twenty minutes this morning ... it's probably just..."

"A system glitch," said Keeler, American and Redfire in unison. Keeler looked at the other two. "Somebody owes me a gaseous beverage. Have you had many system glitches?"

"No more than one would expect for a ship of this complexity," American answered.

"I didn't think there *were* any other ships of this complexity," Keeler said.

"Prime Commander, I have personally reviewed the error logs," Lear interjected, rather urgently. "The glitches have all been minor."

Redfire was standing behind her, and Keeler detected just the slightest shake of his head, and a glance at the deck. Keeler nodded. "Very well, I'll review your analysis later. Is that my chair?"

They had completed a circuit of the Command Center, and arrived at the Inner Bridge. The Inner Bridge was at center rear, raised above the level of the rest of the deck, shaped like the business end of a shovel, containing four stations for the ship's top officers. Keeler took his place and leaned far back. The chair was comfortable, although his office chair had been better.

"Prime Commander ... " Lear asked.

"'Commander' will do," Keeler said. "I realize Republic kept a whole whoop of unemployed linguists and otherwise unemployable relatives of Ministry adminicrats employed for twenty years working out the titles and honorifics for the Odyssey Project: Prime Commander, the Tyro Commanders, and below them the Lieutenant Commanders, and below them squads of Lieutenants and Tyro Lieutenants and Specialists and Technicians. And I understand it, but I am a simple man, and I like things simple. Commander, captain, or even, 'High Sailor,' suits me fine."

Lear blinked at him, then continued. "Would you like to see the rest of the Command Tower? I have planned to show you telemetry labs, sensor stations, Primary Flight Control, Environmental Control, the Primary BrainCore, and one of the ship's four Mediplexes."

"I've been in transit for most of the last three weeks. Frankly, what I would like to do is settle into my quarters."

"Very well. We can pick up tomorrow after your status briefing. I'll give you a synopsis on the way to the Habitation Complex."

"Perhaps Tyro Commander Redfire could escort me. We could wax nostalgic... I mean, unless there are ladies present. The last time I waxed my nostalgia in front of a lady, I nearly got arrested."

A flash of reluctance crossed Lear's face, but she erased it with a perfunctory smile. "Of course. We follow Sapphirean Time-Keeping on this ship. First watch commences at 0700 hours. I'll see you then." She turned briskly and set off to the other end of the Bridge.

Redfire clapped him on the shoulder, "You offended her, Ranking William," he said, using a customary Sapphirean honorific. "I like that. The last commander never had such low-swinging tonkas."

"God rest his soul," Keeler finished for him. The two men strode toward the double hatch at the rear. Keeler paused before exiting, turned to address the Bridge Crew. "Well done, one and all. When I was offered this command, the overpaid adminicrats at the Odyssey Project Directorate assured me I was getting the finest crew in the entire fleet. Nothing I have seen has contradicted that assertion. Carry on." With that, he tucked his walking stick under his arm, and proceeded to the transport dock.

"I couldn't help noticing, Ranking Phil," said Keeler in the transport pod, "that you didn't share Executive Tyro Commander. Lear's conclusion about the system problems."

Redfire looked over his shoulder, as though afraid someone might be listening. "Can I trust you, Ranking William."

"I wouldn't if I were you."

"Not every system glitch was minor. In fact, one so-called glitch is why you're here."

"You mean the shuttle accident that killed Commander St. Lawrence."

"Za. Do you know what the official determination was on the crash of his shuttle?"

"I read the report. Something to do with gravity?"

Redfire explained. "When an Aves lands, *Pegasus* redirects its artificial gravity field away from the flight path. *Pegasus* cut gravity for St. Lawrence's Aves, but the shunt failed, just for a second. The gravitational drive of the Aves was still engaged, and coupled with the gravitational shear from *Pegasus* – two fields pulling different parts of the ship in different directions – ripped it apart."

Keeler tapped his walking stick against the side of the pod. "If I could understand that, it might sound pretty spooky."

"The official explanation makes sense, until you consider that nothing like this has ever happened before. For the failure of both safety systems, the shuttle's and the ship's, to happen during a 13-second window during which the Aves would be destroyed ... the odds are on the order of 2 to the power of 131 against."

"Long odds, indeed, but still, one of a number of small glitches, albeit one with catastrophic consequences."

Redfire drew back. "When you're having numbers of minor system glitches, it tends to explain one minor, but catastrophic, glitch when it happens, doesn't it?"

Keeler let out a short, startled breath. "Are you suggesting homicide, Lieutenant? By God, man, it's been nearly three hundred years since anyone on Sapphire has committed a homicide! I should know; it was one of my ancestors."

"The commander wasn't on Sapphire when he died, sir. And I wasn't necessarily suggesting a homicide."

"What then?"

"Assassination."

"There's a difference?"

"Under Republic Law there is. There is a sanctioned arm of the government empowered to perform the 'selective elimination of individuals to serve the greater good.'"

"You speak of the Centurions."

Redfire could not mask his surprise. "You know of them?"

"Za, Centurions, the Special Operations Branch of the Republic Ministry of Public Safety. Not well-known, but any good student of history can find the hand of the Centurions in, or suspiciously near, certain events in Republic History . . . although frankly I think the conspiracy theorists overstate their influence. They have their origins in Republic's Wars of Unification. They were empowered to eliminate persons whose corruption or incompetence was a threat to Republic objectives. But they were supposedly disbanded once the planet was under a single planetary government. Are you suggesting that St. Lawrence was so incompetent or disloyal that the Centurions eliminated him to safeguard the mission and the ship?"

Redfire shrugged. "It's just a theory... not the only one." The transport pod pulled to a stop, and the exit hatch opened into Deck Seventeen, Section 66:30 Habitation Area Alpha. Simulated sunshine illuminated a landscaped pathway lined with lilacs and aster trees. High above, the clear shield of curving hull made for an artificial sky.

"Ranking Philip, you have come perilously close to accusing one of my officers of murder, and much closer than that to slandering her reputation."

"I realize that, sir, but I feel you have a right to fore-arm yourself."

"I mean if you are willing to say such scandalous things about my first officer, what would you be willing to say about me." He paused as they entered a kind of courtyard between habitation complexes, stacked like blocks into pyramids. Keeler looked at each in turn, frowned and pulled out a data pad. "And on that subject, what does the crew think of me, from what you've heard?"

"They know you opposed the Odyssey Project from the beginning. They know you left the Odyssey

program when this ship was given to St. Lawrence. Some of them doubt you have the will to command."

Keeler nodded agreeably. "Ah, good, I'd hate for all that to come as a surprise. I think this is where I will live." Following the directions on his datapad, he crossed the quad to a set of quarters set apart from the others and designated for *Pegasus's* commanding officer.

He touched the keypad and waited a moment for it to key into his aura, the unique electromagnetic signature created by his life force. He gestured for Redfire to accompany him in, which saved Redfire the trouble of inviting himself.

They stood in the entryway, looking over the space, bland and undecorated, every trace of the previous occupants meticulously removed. Keeler sighed.

"I am sure it will look better when they bring your things up from the landing bay," Redfire said.

Keeler shook his head. "On my estate, my butler's bathroom was bigger. Perhaps I can request additional quarters for closet space."

Redfire was casually examining the bare walls, discreetly memorizing the layout. "I'm sure you can do whatever you want. There's plenty of empty space on this ship. Only 20% of the habitable volume is being used."

"I know that. Seems a waste, really. Space for 35,000 on this ship, setting out with only a fifth of that. A lot of people back home would have given anything to be on-board."

"They planned *Pegasus* for a multi-generational mission. Room to grow, room to take on human crew from other planets. The mission planners built in capacity for the ship's population to double each century we're in space."

"Insanely optimistic if you ask me," said Keeler.

"Also, when the Pathfinders were redesigned, the size of the ships doubled, but the crew complement remained the same. Apparently, someone forgot to notify the Odyssey Project Human Participation Sub-Directorate."

"Ah, once again, bureaucracy triumphs over common sense. Look there, and you'll find the root to all of the worst catastrophes in humanity's history." He began looking around the room to see if there was anything to drink. He would probably have to ring someone up for that. "In a like vein, I suggest we investigate the more mundane explanations for these 'system glitches' before making allegations against our officers."

"Just watch out for ExTC Lear. Once we leave the system, there won't be any other alternative commanders."

Keeler sat down on the hideously plain, general issue couch. "I sense you mean well, Ranking Philip. However, in my position, I can't tolerate rumor and innuendo against one of my officers. I respect your candor, I respect your proficiency, I respect your sense of honor. I expect you to extend the same respect to my command."

Redfire stayed cool. "As the only one standing between her and command of this ship, you have my utmost respect, and my eyes watching your back."

chapter two

Commanding Officer's Study

The Commander's Conference Chamber looked out over the rear of the ship, walled by floor-to-ceiling viewports. Goneril Lear sat at conference table, and checking her chronometer: 06.95. She tapped her fingers table and silently recited a brief, tart lecture on punctuality. She was pleasantly surprised when Commander Keeler appeared at 06.98, appropriately dressed and looking rested. "Good Afterdawn, Commander. I trust you found your suite to your liking?"

"Thank you, it is adequate, or soon will be. A techie and some mechanoids are going to set up my things there today."

She spoke with a tone she thought sounded sympathetic. "I am sure it's an adjustment for you. On Republic, we are accustomed to living in controlled environments. Shall we begin?" He nodded to her. She proceeded through a detailed status briefing. Two flight crews were being rotated to account for two Aves that were stranded by a methane storm on Colossus IV. There was a scheduling conflict with the artifactories, the huge complexes housed in the UnderDecks where consumer durables, foodstuffs, and anything else that was needed on board the ship was fabricated. Otherwise, all was normal. "All in all, a fairly typical duty period," Lear concluded.

"Good," Keeler grunted, "I trust my capable officers can handle all of these crises with little oversight on my part. Is there anything else? There are inspections I should make." Chief among them was the virtual golf course on Recreation Deck 3.

"I thought we might discuss our first destination, the 10 122 Pegasi system, where we believe a colony called Meridian is located. Have you had the opportunity to familiarize yourself with what we know of this world?"

Keeler nodded again. "On the basis of its climate, population, and agricultural base at the time of last contact, it's considered a good prospect for a surviving colony. If Meridian is alive and thriving, other colonies to be in good shape as well."

"Let me show you something that may not have been in your mission briefing," Lear said. When Lear activated the hologram display, the walls, floor, and ceiling of the room transformed into a holographic environment. She displayed a gold and pink spacecraft bulging with sensor and antennae, separated from a thruster array by several hundred meters of metallic girders.

"This is a probe Republic sent to 10 122 Pegasi some 270 years ago under the Olympic Project. It was equipped with a narrow tachyon-pulse transmitter to communicate to our home worlds." She paused. The commander's file had indicated limited technical proficiency, so she added. "Naturally, the nature of tachyon-pulse technology meant that two-way communication was not possible."

"Naturally."

"The probe for Meridian successfully reached the system and transmitted some long distance telemetry, which we received only about four years ago." The walls showed a disk in the distance, a bluish shade of green. Data scrolled up the side: atmospheric composition, gravity, distance from the sun, and various other pieces of information gathered by the sensors. The disk grew larger, then suddenly vanished in a blur of static.

"What the hell just happened?"

"The probe never made orbit," Lear explained. "The last transmissions indicated that some problem had developed in the probe's short-range communication array; the one used for standard neutrino and carrier-wave transmissions. We think it led to a cascade system failure." She studied his face, his thoughtful expression.

"The Olympic probes carried crew, didn't they?" he asked.

"There were nine people on the probe, in stasis. May Vesta Guide Their Souls. What I've just shown you has not been much seen outside the Republic Ministry of Space. I know that may offend your Sapphirean sense of 'open-ness,' but we have our reasons. And my reason, in showing you this, was to emphasize that our ambitious exploration must be balanced with caution and discipline."

"Indeed," he stretched and settled back in his seat. This prickled her. The body language was far too relaxed for a command officer.

"And on that subject," Lear stated, with a strangely cautious tone. "There is a chronic problem that your predecessor ...Vesta guide his soul... never effectively handled, that I thought might provide you a chance to establish your leadership. Some of the personnel – specifically, the Sapphirean personnel – have some difficulty conforming to the on-duty dress code."

Keeler furrowed his brow. "You mean they don't like wearing uniforms."

"Exactly, Commander. For some reason, the personnel from your planet..."

"We don't wear uniforms on Sapphire. Uniforms are considered an intrusion on individuality. Even our Permanent Defense forces are given broad discretion. Why is it so important?"

"You notice how the jackets are color-coded. You and I are command personnel; our jackets are trimmed in white. Flight personnel have dark blue trim. Light blue is medical. Red is Tactical and so forth." She paused, wondering if she were being too condescending with information he ought already to have known.

To her surprise, the commander began musing aloud. "They're really nice jackets. Nice, just heavy enough, cottony, comfort-moderating. Lots of pockets, inside and outside, on the sleeves. The black really brings out the trim on the shoulders and sleeves. Combine them with a kinky little black strapless dress and high-heels and we could host a cocktail party."

Lear faked a chuckle. "I don't think it would be appropriate for me to appear in high heels and a strapless skirt."

"Who said anything about you?"

Just as Lear was about to draw him back on topic with a well-chosen phrase, he asked. "Is the uniform problem hurting efficiency?"

"Bad discipline always impacts efficiency... although the results may not be measurable." She paused momentarily. "On the other hand, those gloves Tyro Commander Redfire where may interfere with his ability to use the ship's weaponry."

Keeler held up a hand. "Those gloves mark him as a Master Artist. Owning them is a very high honor on my planet. The only way an artist gets them is for another artist to hand over his own, in acknowledgement of the greater talent of his fellow artist. They mean as much to him as your rank insignia does to you."

She leaned in closer, and spoke even more intently. "Commander, this would be a strong statement to the crew."

"Za, a strong statement that as captain of this ship, my primary concern is going to be that every one is wearing the right color jacket."

"It's not about the jackets!" she insisted. She took a breath and steadied herself. Her eyes dug into him, and she continued with carefully measured words. "A time may come when the crew will have to follow your orders without question or hesitation to ensure the success of our mission or, indeed, our survival. If they don't respect you, how can you be sure they will follow your orders?"

"Tyro Commander Lear," Keeler said quietly. "I am not going to waste whatever respect I may already have on a trivial issue like how the crew dresses."

"Commander, this is not a university campus, this is a ship with a highly important mission, possibly heading into dangerous space. The crew must have the discipline to deal with whatever we may encounter. Besides, the uniforms help erase the differences between our cultures and enable us to act as one united team."

"Then, why do they have these patches on the sleeves?" Keeler indicated the left sleeve of his jacket, with the colorful crest of Sapphire sewn onto it. The blue and silver patch of Republic was on Lear's. She

had no answer. Keeler frowned. "I'll speak with the department chiefs. If they feel the uniform situation is as dire a problem as you make it out to be, I will address the problem then."

It was not the answer she wanted, but it was a beginning. She had known this one would be difficult, his psych-profile had indicated stubbornness, but the voyage ahead was long. She had faith that he would see that her way was the right one, and she hoped it would be sooner rather than later.

The hatch to the door chimed. "Enter!" Keeler and Lear said in unison. She flinched, wondering if he would take this as some kind of challenge to his command. To the contrary, Keeler simply smiled and wiggled his eyebrows.

Technician Halliburton entered with a pair of mechanoids, one a squat schlepping drone, the other a lifting bot. Between them was a large, old, and comfortable looking armchair.

"Ah, good!" the commander exclaimed. "My comfy chair. Let me show you where to install it."

Agro-Botany Bay – Deck 11

Pegasus carried enough irradiated, flash-frozen food to feed ten-thousand people for thirty years. Nevertheless, someone had thought it worthwhile to maintain fields and gardens on board where fresh food could be grown to supplement the supplies in storage.

Someone else had come up with the idea that ship's personnel should be rotated through the Agro-Botany Bays on six-week schedules. It probably looked like a good idea at the time, Specialist David Alkema was thinking as he prodded a hydroponic mattress with a sensor to test soil alkalinity in the ship's crop of ultra-wheat. "Nominal," he reported.

"Really?" Kayliegh Driver chirped, taking the sensor from his hands. "We may have to reformulate the fertilizer mix," she said excitedly. Climatology was her profession, but only because her score on the Botany exam had been two points lower.

"Perish forbid," said Alkema. *So, this is what passes for excitement in Agro-Botany.* He looked up. Unlike the Garden-Parks, there was no holographic sky overhead in the Agro-Botany Bays, only the gunmetal blue organic metal composite – a combination of materials strong, resilient, and with a capacity for self-repair and sensory transmission like that of human muscle and flesh – of the ship's structural plating. "How many more grids to check?"

"Four more here, then we'll check the hemp fields in Bay 12. Did you have plans for later?"

Alkema was calculating how long it would take him to get to his quarters, change, and make it to Double Happiness, a loud music club located near the hangar bays. "Za, I am planning on meeting friends for lively personal interchange. Would you like to come?"

She smiled away from him. "I am semi-married, or I might."

Alkema looked perplexed. "Semi-married?"

She explained. "I fell in love with a man I met in the Odyssey Project Training Facility. We would have been married, but the Ministry of the Family requires a waiting period of a full year. We held an unofficial ceremony, so our families could participate, but we can't legally marry for another quarter and sixteen days."

Alkema wanted to ask if this meant they were "semi-maritally conjugating," but decided it would be impolite to ask.

She went on. "Maybe you could ask my brother along. He's been looking to meet a good woman. Kind of shy, but once he gets to know someone..." She was interrupted by a hissing noise from the rear of the bay. "What's that?"

"The auto-fertilizer," answered Driver with some alarm.

"That shouldn't be activating now. Not with people in the bay."

Neg, it shouldn't. Alkema knew about the chemicals used to promote the rapid life-cycle of ultra-wheat. Caustic to the skin, they caused hemorrhaging in the lungs if inhaled. He shined his light toward the sound. The auto-robotic fertilizers had deployed from the ceiling and were spraying the wheat crop from two and a half meters overhead, about two hundred meters away. They were also moving in his direction at a speed a little faster than a man could run.

He grabbed Kayliegh by the arm and began running. There was a control column midway between them and the far bulkhead. It took only a few seconds to reach it. By then, they could smell the acidic, burning odor of the chemicals. Kayliegh ripped open an interface panel and tried to shut down the fertilizers, but to no effect. "Try an emergency override," Alkema told her. "Cut power to the whole bay."

She input her override code and flipped the master-command switch. They waited a second... two seconds... but the gray cloud continued to advance. "It's not working."

"Kumba Yah!" Alkema looked toward the exit hatch. It was still 70 meters away, and to reach it would require a diagonal run across a field of waist-high ultra-wheat. No way could they make it. The wheat would slow them down, trip them up. But a straight run up the pathway that divided the field... "Run," Alkema commanded. He grabbed Kayliegh, then dashed down the pathway.

"We'll never make it," she cried. Alkema ignored her and hoped that one emergency system in the bay still worked. The distance closed in front of him with terrifying slowness. Five meters out from the bulkhead, he launched himself at the wall, slamming his fist against the Fire Emergency switch. He landed hard and heard, or felt, his knee shatter against the deck. A second later, Kayliegh collapsed on the deck beside him, and water poured down on them.

Commanding Officer's Study

The ancient, wizened visage of Dr. Daisy Reagan from *Pegasus's* Medical Core scowled out from the com-link in Keeler's Study. "Specialist Alkema has a shattered patella, several pulled muscles, bruises, and a laceration on his left hand. He'll remain unconscious while we rebuild the broken tissue, but should be back to normal in five to seven days. I released Specialist Driver. Her injuries were minor, and if she showed me a better way to stow my instruments one more time, I was going to strap her to a tranquilizer bed."

"Thanks, Keeler out." He turned back to Lear seated across from him. "Well, that's one piece of good news. Technical tells me that what happened in the Botany Bay was a system glitch that activated the fertilizer units and shut down all the control columns in that bay. Like every other malfunction to date, they can't isolate the source."

"I am very concerned about these glitches," Keeler continued. "I know most of them have been minor so far, but there have been two fatalities, and now two near fatalities. What if there is a major failure when we're a few hundred light years from the nearest assistance?"

Lear was the picture of calm reassurance. "Commander, almost every anomaly to date has occurred in a peripheral system. There have been no system problems at all in the core systems of life support, propulsion, integrity, or master control."

"Yet!" Keeler interjected.

"We haven't encountered any problems we can't deal with on our own. This ship has been effectively self-sustaining for over a year. Some enhanced safety protocols to protect the crew are in order, I agree. But, I see no reason to delay launch."

"If you've been dealing with these problems for a year, why haven't you isolated them?"

"We have, in fact, traced almost all of them to programming errors. In fact, compared with a year ago, or two years ago when the system was first brought on-line, we've reduced the number of glitches to almost none. It doesn't seem that way to you because you've just come in at the end of a long process. Compared to where we were, we've come a long way."

"Not far enough, apparently. What if a glitch in hyperspace destroys the insularity fields, or causes us to lose navigation?"

"We've done thirty-six transitions during space trials with no failures whatsoever. None!" She was so intense, Keeler could almost see heat wavering in the air around her. "Commander, I have a family on board. A husband and two children. I would sooner cut my own throat than put them in danger, and I say we launch as planned. We can handle these glitches."

Keeler sighed. "We will proceed toward launch for now, but I'm one glitch away from cancellation, is that clear? Even if I flush the euphemism in my quarters and it plays the University of Corvallis fight song, we're not moving, am I clear?"

"Absolutely."

"Dismissed."

When she, reluctantly, left, he rose and looked over the rear of his ship, where an Aves was approaching the landing bay, graceful as a Carpentarian Tiger Hawk gliding over a mountain lake.

He was not ready to entertain Redfire's thesis that the glitches were deliberate, and that his tactical officer had even made the suggestion still offended him, but, he sensed he could not completely dismiss it, for some reason he could not name.

He decided to go to his quarters and sleep. Things might seem different in the afterdawn.

Amenities Nexus – Deck 23

Eliza Jane Change was crossing the overwalk, a kind of broad sky-bridge that overlooked *Pegasus's* Amenities Nexus, a range of food courts, recreational areas, and small shops set between the Command Tower where the crew worked and the Habitation Areas where they lived. The Nexus bustled with personnel as duty shifts changed, and personnel coming off paused to grab a meal, or pick up a personal item. She had agreed to meet Eddie Roebuck here after his duty shift in the hangar bay.

Eliza had met Eddie in the first period of Odyssey Project Training, when she had been ready to walk out, consequences be damned, and he had been much the same. Their training teams had been tasked to scale a mountain, erect a campsite, and survive for ten days without support. She found the exercise thoroughly asinine and pointless. He found it 'a fragging frag in the fraghole.' She thought it amusing that he was only in the Project to impress a woman who had dumped him. He was impressed that she was there under the heavy hand of the Mining Guild. "Kumba yah!" he had said. "The Guild is practically Organized Crime!"

In Eddie's mind, the Guild represented an escape from the clean, wholesome family-friendly world that was Sapphire, and nothing she ever said dissuaded him of that perversely romantic image. Sapphireans may have celebrated personal liberty, but they revered personal responsibility. It was Eddie's theory that The Guild was created explicitly as a dumping ground for Sapphire's "loser-class," and he was ready to enroll.

Surrounded by the most ambitious children of Republic, and the luckiest and most talented sons and daughters of Sapphire, the two people who most would have preferred to have nothing to do with the Odyssey Project had found each other. The ironic part was, without the other to lean on, each would have washed out. Their friendship had sustained them in an endeavor neither of them really wanted to participate in.

She found him already waiting for her, leaning over the rail, staring out across the Nexus, his expression scowling, but amused.

"Did you get off early?" she asked.

"In a manner of speaking. There was some unpleasantness." Before she could inquire further, he took off on another tangent. "Look at 'em," Eddie said, a wave of his hand sweeping over the scene below him. "It looks like a fragging shopping mall."

"I know," Eliza agreed. In her opinion, A true ship ought to surround its occupants with the sound of throbbing engines, the respiration of ventilators, the pulse of cooling systems, and the metallic creak of deck plating. Its trusses and beams should be exposed and give the appearance of sturdy hardware. The corridors ought to be lit with strips of incandescent tubing and glow-spheres. Ideally, there should be occasional reactor leaks and radiation surges, as well as the occasional hull breach and emergency decompression. These kept the crew on their toes. The fussiness of this *Pegasus* offended her, with its food courts, and plant life, open spaces, and elaborate internal framework of supports designed to look like statues and arches, all of it nothing more than wasteful, unnecessary mass. If these people were so eager to leave their worlds behind, why did they bring so much of them along?

Eddie looked at her and smiled, bright as solar flare. "I think I found a place more for people like us. It's..."

"You!" someone interrupted. They turned as one to see a furious young man in a Flight Core jacket bearing down on them. He was lean, with wiry light brown hair beady brown eyes. His hands balled into

fists as he charged across the overwalk.

Eddie held up his hands. "Yo, Beauty, pacify yourself."

The pilot closed in, and stopped just outside arm's length, curling his arms as though restraining them from wrapping around Eddie Roebuck's throat and squeezing. "I just came from the landing bay. My ship's starboard underblade is scorched, and the crew chief says that you're the one responsible."

"Beauty, it was only a small fire."

"Only a small fire?" the pilot gasped.

"Za, and not really my fault. See, when you flew through that methane storm, you picked up a methane pocket in your inboard landing pod. All I did was..."

"All I know," shrieked the pilot, "is that my ship was not on fire when I turned it over to you." He lunged toward Eddie, and Eliza put herself between them.

"Flight Lieutenant... Eureka, is it?"

"Aye," he answered, drawing back.

"Were you scheduled for any additional flight time between now and Launch?"

"Negative... but my ship..."

"Won't be needed for the next thirty-seven days, minimum," she said. "In that time, the damage will be repaired and Mr. Roebuck will be disciplined, and I can assure you, it will be unpleasant."

"Not as unpleasant as what I have in mind."

"Whereas a reprimand for violence could keep you grounded for sixty days," Change finished.

This sunk in. The pilot's shoulders slumped. He looked a little beaten as he backed away, but paused for a parting shot before slinking across the overbridge. "Everybody knows you're dys-functional, Roebuck."

"Pilots," Eddie huffed.

"They're not all bad," said Eliza Jane Change. "You just have to know how to handle them."

Prime Commander's Quarters

Keeler woke to the sound of glass shattering. He opened his eyes to see bits of his skylight raining down into his bedroom like dust and snowflakes. He shielded his eyes, and watched a shadowy form, feminine, and almost feline in the grace of its movement, fall through the empty frame and alight in the center of his sleep chamber.

For the first time, he heard the voice of his ship; reassuring and urgent, androgynous but leaning to feminine. **"Intruder Alert! An unauthorized person has been detected in this area. Ship's Watch is responding."**

She moved onto the pad beside him. Thin as a pipe, dressed in a tight black jumpsuit. She held a finger to her mouth as she approached. "They are going to throw me off this ship, but I have to warn you. You are the only one who can stop them."

Keeler maintained his calm, faced her directly, and softly but firmly demanded. "Who are you?"

"That isn't important..."

"When a woman breaks into my quarters and threatens me, I want to know who she is. Call me old-fashioned, if you want..."

She rolled her eyes, and they took a bit longer than usual to settle back. "You may call me Rhyme. And I came to warn you, not to threaten you. Turn back. Do not launch this ship."

"Are you an Isolationist?"

She quivered and spoke in one long breathless sentence. "Some there are on this ship who believe that all the worlds outside were eaten by dragons some there are who hunt them some there are who wear this ship's colors but turn black down below I am not of their number I only wanted to see the worlds without end."

"Slow down," Keeler said, knowing that if she could stop talking like that then at least he would know he was not dreaming.

"But she is awakening, Commander," the woman crossed over the verge of tears and great wet streaks streamed from her eyes. "She is awakening, and she will not rest again."

"Who is awakening?" Keeler asked.

The woman began to give him an answer, "She... the mind..." but it dissolved into incoherent sobs. Just at that time, two sturdy men and a bullish looking woman entered, dressed in the heavy black and orange of the Ship's Watch.

"Move away from the Commander," the woman barked.

The woman turned to Watchmen and shouted. "He was selected by the hands of the dead. They counsel him, now."

Her words sent shivers up Keeler's back held up his hand. "Wait! Who is she? Who is waking up?"

Rhyme opened her mouth as though trying to scream something... a name? In the same gesture, she raised her arms, as though to pull out the words from underneath her fear. A Watchman, perhaps mistaking this for a lunge, fired a shot from his pulse weapon that caught her in the center of her chest, sent a shock of white light through her body and dropped her on the bed.

"Are you all right, Commander Keeler?" the Watchman asked.

"Who is she, and how did she get in here?" Keeler demanded.

"Sir, those are the same questions we will want answered."

The commander watched as the two Watchmen gently lifted the small, unconscious form, and laid her on a couch. "What will happen to her?"

"She'll be taken to the nearest Mediplex and guarded until she regains consciousness. After an interrogation, she'll be sent back to her planet of origin."

Keeler began to rise from his sleep unit.

"There's no point in that, sir," the Watchman continued. "She will be unconscious for several hours. You can interview her in the morning, if you like. We will post a Watchmen outside your quarters until this incident has been investigated."

Reluctantly, the commander nodded. Even with the ministrations of his sleeper, he doubted slumber would come easily now.

chapter three

Pegasus – Keeler's Quarters

Tyro Commander Redfire, dressed in the black meditation robe of the Warrior Monks of Sapphire's Arcadian Hinterlands approached the guard at the entrance to Keeler's Quarters. "I received an intruder alert. Is the commander all right?"

The Watchman paused, as though considering whether the commander's condition was privileged information. He was a Republicer. "The commander is all right."

"I should check in with him," Redfire persisted. He waved at the 'someone's-at-the-door' pad, which was programmed to activate only if the occupant was awake and receptive to company.

Keeler appeared on the pad. "Who is it?"

"Redfire. I heard a commotion – when your chosen art is breaking things, you develop an ear – and I thought I'd check in on you."

"Come on in, door's open, or 'hatch' or whatever spaceship-specific nomenclature is appropriate."

The hatch slid open and Redfire entered. The interior decor had been greatly enhanced since Redfire's last visit. Personal effects from the Keeler Estate had replaced the O-P issue furnishings. Redfire made his way toward the terra-cotta fireplace and the red, blue, and yellow tiles that surrounded it. The objets-d'art Keeler had chosen to bring were all very old; his furnishings were new, but just as expensive; tables and cabinets of Arcadian hardwood, seats and couches covered in rich, Borealan suede.

Keeler settled onto a couch. "While you're scoping my digs, why don't you pour us some of that brown liquid from the pretty crystal bottles?"

"Spirits?"

"Is that what that is?" Keeler chuckled at his own joke.

Za, it is, Redfire thought. Also, there was quite a lot of it, and an even larger quantity stored in a cargo bay, if the technicians who had unloaded the Prime Commander's Aves were reliable. As he poured the drink, a sensor in his left eye provided a schematic of the quarters. As he had expected, the scan indicated one of the rooms had been sealed off and insulated against scans of any kind. Interesting, *what was he hiding?*

"So, what did I miss?" Redfire asked.

"Oh, just a crazy woman breaking into my bedroom. Nothing unusual except this one was going on about people on his ship who thought the other colonies had been eaten by dragons."

"Really? What else did she say?"

"Something about someone waking up, perhaps, a saboteur within the crew awaiting activation, in other words, a sleeper? What do you know about stowaways on my ship, saboteurs in the crew?" Keeler accepted the glass of Jutland firewater Redfire offered him.

Redfire poured himself a glass of Old Matthias. "Not much. I'm a tactical officer... ship's weapons, Aves, Accipiters, Warfighters. Internal ship's security is Ex-Commander Lear's area." "Ex-Commander" was a kind of in-joke among certain of the crew, a reminder that she had twice lost a chance to command.

"What can you tell me about the Isolationists?"

"Probably little you don't already know. There are sixteen distinct Isolationist phalanges, all of whom oppose Odyssey, and nine of whom even oppose contact between our two planets. Most groups are motivated by a belief that our exceptional cultures would be contaminated by contact with other colonies. The most dangerous groups believe that we will bring back to our worlds whatever destroyed the Galactic Commonwealth."

"Have you explored the possibility of an Isolationist connection to the system glitches we have been experiencing? Possibly a saboteur?"

"It's a worthy thought," Redfire assured him. "Some of the Isolationists wouldn't see sabotage as an evil act, but as a necessary step to save our worlds." He paused, "A convenient reason for Centurions to slip in among our crew."

"Again with the Centurions," Keeler groaned and rolled his eyes. The door chimed again, and identified the man outside as Medical Specialist Jersey Partridge of Medical Core. "Can I help you?" Keeler asked, without opening the door.

"Uh, the Watch said you had been attacked. Do you require medical attention?"

"I'm fine, go away."

"Are you certain?"

"Go away or I'll pull down your pants and mock you mercilessly."

A pause. "All right, Prime Commander. If you change your mind, just comm Medical Core."

Keeler turned back to Redfire, irritation knitting his brow. Redfire lowered his voice. "I think the Reps have a hidden agenda."

"I have to disagree with you. The Republicer agenda is quite explicit. They want to make sure everybody cleans their room, eats their vegetables, and engages only in wholesome, state-approved recreational activities. They have an image of an ideal, orderly society, and they want everyone else to follow it.

"Three centuries ago, and change, travel resumed between our two planets. And for the next hundred and fifty years, Republic, recently overcome with evangelistic fervor at the virtue of planetary unity, tried by means overt and covert, to overthrow our government and install one more to their liking. They eventually gave up, but suspicion remains to this day. They still think of us as reckless fools, mad with freedom," Keeler shook his head. "They have no idea how much social discipline and hard work it takes to maintain a free society."

"Getting back to the point," Redfire continued. "Some believe they are using the Odyssey Project to bring back the Commonwealth, with Republic as the new capital."

"That is also no secret. Republic's ruling class hopes that Sapphire and Republic are the first worlds since the Collapse to recover inter-stellar space-faring technology. They see this situation as an opportunity to rule the galaxy."

Redfire nodded. "So, you believe me."

Keeler took a long swallow of the firewater. "They are an ambitious and power-hungry people. However, I believe they are going to be disappointed."

"How do you figure that?"

"For the Republicers to build their Pax Republica, there have to be many human worlds out there without any central organization. If this is so, those colonies are likely to have very different levels of development. Some will be centuries ahead of us, some centuries behind. We're also talking about thousands of years of cultural divergence on each world. Republic proposes to unite them all. While you contemplate the difficulty of this task, would you be good enough to refill my glass?"

"Of course," Redfire said, hoping this was a usual level of alcoholic consumption, and not a means of coping with Tyro Commander Lear.

"In a way," Keeler mused. "I hope the Reps are behind the system glitches."

"Why is that?"

"Because, Republicers want the Odyssey Mission to succeed. Therefore, they're no threat to my ship. Isolationists, on the other hand, they work in the shadows, they're capable of anything, and they scare the hell out of me."

Amenities Nexus

Matthew Driver was taking his breakfast in the same concession where he always ate. He sat alone, reviewing *Prudence's* maintenance records, oblivious to the buzz of chatter around him, or the hum of automechs conveying food orders.

Lug, who ran the establishment, served Matthew's his usual breakfast of grain-cereal, soy-milk, and omni-nutrition biscuit. Lug was heavy-set, middle-aged, came from some pleasant tropical island on Sapphire where people apparently did little but eat, drink, and develop colorful personalities. "Here you go, lieutenant of flight. May I ask you something? Why do you eat this same breakfast every day?"

"That isn't true," Matthew replied. "Some days I have rice cakes and wheat meal platen."

Lug shook his head vigorously. "Listen to me. I am from Thessalia, in the Awkward Islands. Everybody knows Thessalian cooking is the best in the two systems."

"I guess I should try it sometime, but not this afterdawn, good sir."

Lug skulked away. "No wonder you're so short," he muttered.

Matthew turned his attention back to his review, and took another bite out of his biscuit. It occurred to him that he could have come back at Lug with, "No wonder you're so fat." Maybe he would remember it next time.

He was startled when Lug yelled at him a minute later. "O.K., you two. I see you here, both, twice a day."

Matthew looked up to see Lug standing between his table and that of a woman in uniform. She was tall and dark, with interesting eyes. Her hair was drawn behind her head in a shaggy black ponytail.

"You only eat by yourself," Lug said to the woman, then turned to Driver. "You also eat alone. This afterdawn you are both alone. So why not be alone together, and leave Lug one less table to clean up?"

Driver looked at the woman, and the woman looked back at him, both with awkwardness. Finally, he lifted his tray and moved toward the woman's table under the stern gaze of Lug, who grunted, with satisfaction, and returned to his kitchen.

"Do you mind if I join you?" Driver asked.

"Please yourself," she told him.

"I'm Matthew Driver, Flight Lieutenant."

"Eliza Jane Change, Lieutenant Navigator."

"Nice to meet you." He set his tray down and took a seat. The food on her plate, two blue orbs and an orange and green paste, was unfamiliar to him. "Where are you from?"

She rolled her eyes, sighed in disgust and slammed her mug of hot green liquid down on the tabletop. Matthew Driver had never been a smooth operator with women, but he couldn't remember a woman ever having an adverse reaction to him this quickly. "Sorry I asked. I was just trying to make conversation."

"You groundlings. That's practically the first question out of your mouth when you meet somebody. 'What planet are you from?' What outgassing difference does it make?"

Matthew noticed that there was no origin patch on her uniform.

"I'm from the Mining Guild," she explained. "I don't live on planets, I rip them apart to get at their minerals. I never even walked on a planet until I was sent to Republic for this... Odyssey project."

Driver smiled awkwardly, and gave it another try. "Oh, so, Republic was the first planet you ever set foot on. That's my home-world, Republic. I was born in the City of Science, but I spent most of my life in Midothian. Uh, what did you think of Republic?"

She shrugged and jammed her spork into one of the orbs. "A big ball of rock surrounded by gas, same as any other terrestrial planet. They're all awful. On a ship, you're in complete control of your environment. But down there... how do you stand having gravity all the time? And atmosphere. It took me three weeks to adjust to that so-called air you have." She sighed and picked at her orange and green paste. Her tone softened. "It wasn't all bad. The oceans are nice. I liked the oceans."

Driver knew she was not talking about the shallow seas on his world, a dip into which would have left acid burns. "When did you see the oceans?"

"During survival training in the desert on Sapphire, a friend took me to a city called Kandor. We went to the beach almost every day. At first, I couldn't imagine how being immersed in cold, filthy, unprocessed water could be enjoyable, but it was really nice." Then, as though she had relaxed too far, she tightened up.

"I'm sure we'll find a planet with oceans," Matthew offered. Eliza Jane shrugged and dug out a chunk of blue orb.

For an uncomfortable few seconds, there were no words between them. Driver looked her over; tall and lean, dark hair, a hard-looking body. The fact that she was from the Mining Guild gave her a kind of raw, exotic edge. He had seen mining ships close up, flying out inspection and customs parties from the Ministry of Importation. Until the Pathfinders, they had been the largest machines built in the systems. He wondered what she used to do on the mining ship. He wondered what she thought of him.

"Tomorrow's the day," he said. "Do you have any plans for the launch?"

"I plan to be on the bridge, driving the ship. I'm the navigator-on-duty. Where will you be when we launch?" she asked.

Her tone made him feel rather stupid and trivial. "Actually... I'm going to be in the command seat of my Aves. I know it must seem kind of stupid to you, but, I'm a pilot, and it seemed like the most appropriate place."

"You're right," she said, standing. "I've got to get to the bridge. Meeting you was not unpleasant, Flight Lieutenant Driver."

"You too, Lieutenant Navigator Change." Only after she'd left did it occur to him to wonder whether she'd meant right that his choice of location for launch was appropriate or right that it was stupid.

Pegasus – Primary Command/Main Bridge

Lear sat in the First Officer's seat on the Inner Bridge, reviewing Power Production Reports and finding it compelling that Fusion Reactor Four was nearly 2% more efficient than the other three reactors. She wondered if there was a way to baseline this new performance paradigm synergistically in cross-organizational way.

The entrance hatch slid open, and Keeler entered. Lear stood up sharply and turned to greet him. "Prime Commander, you aren't scheduled for a Watch until Afterdawn, tomorrow. Not that we aren't pleased to see you."

"Ah, the warm brush of a subordinate's lips on my rear flank," Keeler answered brusquely as he crossed to his chair. "I am aware of when my watch begins. What is the status of the woman who invaded my quarters?"

Lear didn't miss a beat. "Interrogation is complete. She is on a shuttle. She'll be turned over to a Sapphirean consulate and then returned to your world for prosecution."

She could almost feel the heat as Keeler's temper rose to a boil. "Why was she transferred off this ship?"

"Standard procedure. There was no reason to keep her here, and the Watch was unaware of any explicit orders to detain her on-board."

"I told them I wanted to speak with her."

Lear felt anger, inappropriate for she knew ship's protocols were on her side. "Perhaps that order wasn't given explicitly enough. In any case, it would take hours to recall her to the ship now. Need I remind you, we launch tomorrow?"

"Who ordered her removed?" Keeler demanded, still at a simmer.

Lear hesitated, just for the barest moment. "I did."

Around the bridge, personnel pretended to be focused on their work, but Lear knew they were listening to every word.

Keeler spoke in a tone of voice she was more accustomed using than hearing. "Executive Tyro Commander Lear, may I have a word with you in my Command Study?" No one in Primary Command could have missed the anger in Keeler's voice.

"Certainly, Prime Commander," she answered, carefully maintaining respect for him, but broadcasting strength. She followed him into his Command Study. Its deck-to-ceiling observation ports made her feel exposed, but she was ready to defend herself.

Keeler didn't even wait to take his Comfy Chair before he began shouting at her. "Why did you ship out the prisoner before I had a chance to speak with her?"

Lear's answered him firmly, with a calculatedly ingratiating tone. "Prime Commander, this was a minor security breach. Well below your level of interest."

"It was in my quarters."

"Prime Commander, with all due respect, Odyssey Project Directive 1037-stroke-11 alpha clearly states that unauthorized personnel discovered on board a Pathfinder Ship within eighty-eight hours of scheduled launch are to be removed immediately. If there had been a verified Detainment Order, I would not have released her, but the Watch did not have one."

"Did the Watch tell you I had asked to see her?"

"Nay, they did not."

Glowering, he walked around the table, approaching his seat. He stood behind it, glaring at her, but not sitting down, challenging her. "Who was she?"

Lear activated a datafile of the woman the Watch had captured. She was wearing an Odyssey Project uniform. "She was identified as Jasmine Phoenix, from the city of Teague, province of Panrovia, Sapphire. Trained as a ship's navigator. Unfortunately, she never adjusted to shipboard life. Her personal stress levels began to adversely affect her performance and health, and she had to be let go. We give navigators a lot of leeway because humans with the necessary gifts to navigate in hyperspace are quite rare. We hoped with more adjustment time, she could serve on a later mission, but, she disappeared before reaching home, and was not seen again until she appeared in your quarters."

Keeler remained grim. "She warned me that there were Isolationists on my ship."

"She *was* delusional. It's simply not possible, Prime Commander." Lear told him.

"How can you be so sure? How can you be assured that these system glitches are not part of some Isolationist scheme to sabotage my ship?"

Your ship? “I designed the security protocols myself. My security team reviewed everyone connected with Odyssey. We identified thirty-one people on Republic and Sapphire sympathetic to the Isolationists with the expertise to compromise our cybernetic systems. None of them had access to the ship or to the Odyssey Project.”

“What about indirect access?”

“Associates of the AI and cybernetics teams were traced to the fourth degree of separation. With all due respect, Prime Commander, I trust my security measures over the incoherent ramblings of a deranged woman.”

Keeler matched her, tone for tone. “I want you to take every available Watchman and sweep this ship deck-by-deck, section by section, for anyone who doesn’t belong on board.”

“Respectfully, Sir, even with the full watch, we could not possibly finish in the time before launch.”

“Then secure some Warfighters from TyroCmdr. Redfire. I guarantee his cooperation. Use and/oroids. Whatever it takes, I want assurance that no one is on this ship who doesn’t belong here.”

There was a pause, then “Aye, Prime Commander.” He turned away from her, crossed his arms behind his back, and stared pointedly out to the rear deck of his ship. She waited, and was about to ask if she were dismissed, when he turned around again.

“Tyro Commander Lear, if you ever, ever countermand an order from me again, even on something you think is insignificant, Redfire will be my Exec, and I’ll have you serving cocktails to Sanitation Techs in the UnderDeck Lounge.”

Lear could feel the heat rising in her cheeks. “There’s no need for vulgarity, Prime Commander,” she answered, trying to sound calm and in control. “And there is no Lounge in the UnderDecks.”

“I’ll make one just for you,” Keeler told her. “You are dismissed.”

She exited. This was a learning experience, she told herself. Next time, she would know how to handle the Prime Commander better. Besides, her orders had been clear. The launch of *Pegasus* must proceed as scheduled, and she would be damned before she let a mentally fragile woman in a black suit interfere with that.

***Pegasus* – Keeler’s Quarters**

Keeler was in even too foul a mood to drink when he returned to his cabin. His thoughts were a knot. He was commanding a ship whose systems still occasionally fizzled and popped, and possibly one with dangerous unauthorized persons on board.

He saw that the glass from his skylight had been cleaned and a technician was putting the finishing touches on the replacement. “We’re nearly, sir. Is it to your satisfaction?”

Keeler looked up. It was as if nothing had happened. “Looks great to me.”

“Is there anything else you need?”

“Nothing that you can give me, Technician...”

“Halliburton,” he said, the patch on his brown-trimmed jacket showed the silver ringed torch of Republic. Keeler cursed himself for looking. Halliburton lingered for a moment, as though waiting to make sure Keeler was certain, then let himself out.

Keeler spoke to his ship. “Show me a schematic diagram of the UnderDecks and other areas outside the ship’s habitation and operations areas.” A hologram model of his ship in cutaway view, three meters long, appeared in his quarters. Great parts of it were taken up by cargo holds, connector passages, artifactories, air and water processing plants, power facilities, Aves launch systems, and other areas the crew was not intended to go. Laid flat, the areas were probably larger than Metropolitan New Cleveland.

Underneath USNC, Keeler knew, was a network of tunnels and conduits, some of them centuries old. Originally designed as part of the university’s infrastructure, they carried heat, water, and power among the University’s buildings. They, also, were supposedly unoccupied. Yet, not a term went by when students were not caught inside them. There was even evidence that, over the centuries, a few people had even lived in them.

And what very few people knew was that an undergraduate William Keeler and a few friends had

once used the tunnels to gain access to the then-Chancellor's office and redecorate it with green shag carpeting and milk-beast print couches (because he wanted it to look like his furniture was grazing). While there, they had also used the Chancellor's data access to send a letter to the board of Observers, proposing the merger of the Engineering and Erotic Arts faculties into a single department, so the tech-heads could occasionally get laid.

The point was, Keeler knew that places where people weren't supposed to go was often where they most wanted to be.

His thoughts were interrupted by his door alert. Before he could check the identity pad, the Watchman outside had already opened the hatch. "Specialist Third Class Roebuck, bringing your belongings from the Quarantine Zone," the Watchman announced. "His presence is authorized."

"I guess that's why he's at the front door instead of the skylight." *Door? Hatch? Whatever.*

"Posh!" exclaimed the young man when the hatch opened. "So, they got you your own personal doorman now?"

"He's supposed to keep people out," Keeler replied. "Apparently, he's unclear on the concept. Ah, good, you brought my traveling companion," Keeler exclaimed when he saw the large white crate.

"Don't give him any tip," came a snarling, high-pitched but throaty and guttural voice from inside the transport module. "He almost dropped me... twice!"

"Well, if you'd stay still," Eddie Roebuck told the box.

Keeler tapped his fingers in the top of his desk and said slowly, "Son, why are you arguing with my luggage?"

Roebuck looked up at the commander. "He was hangin' and bangin' all the way here. Screamin' that he was a political prisoner and a victim of speciesism and animal exploitation."

"Better not open it, yet," Keeler said flatly. "Interesting accent you have, Carpentarian?"

"Za," Roebuck answered. "I'm from New Halifax."

"The southwest side of the harbor, unless I'm mistaken," Keeler went on. "Good people, Halifaxers. Peerless drinkers. Thanks again, you're dismissed. If I need anything else, I'll know who not to call."

When he had gone, Keeler touched a button on the carrier. The front slid open, and a large gray tiger cat wearing a thick black voicebox/collar emerged. He looked angrily at his human. "Good of you to remember me."

"Hoy, Queequeg. How was Quarantine?" Keeler asked his cat.

"It boned," answered the feline.

"Sorry to hear it. How did you occupy the time?"

"Apart from getting blood and urine extracted by your running dog imperialist lackeys? I schmoozed. You know, if you could organize cats, you could rule the universe. If you could organize cats."

"What else?"

"I accessed the engineering data core."

"Bad kitty! Did you learn anything?"

The cat flicked his tail. "Za, I looked into your little problem."

"The glitches?"

"Raaaorww."

"Did you fix them?"

"Neg, but I think I've spotted a pattern. Most of them happen in systems just as they have been brought on-line."

"That's really un-useful. Do you think it's safe to launch?"

"You're asking your cat? Don't you have an engineering crew?"

"Good point."

Queequeg padded across the floor, jumped into the chair behind the Commander's desk and swatted at the interface worked into its eternalwood surface. "One of your engineers, a bright boy named Flash,

has been the point man for fixing the system glitches. He looked into the possibility of a systemic source. But he doesn't think the glitches exhibit a viral pattern, and neither do I."

"What do you think?"

"We both think the problems might be related to the bio-organic components from the Caliph probe in *Pegasus's* BrainCore."

"Related how?"

"The Caliph probe contained an artificial organic intelligence. We use organic technology, too, but what Caliph had for brains compared to our technology was like what a talking cat has compared with tree fungus. *Pegasus's* BrainCore was built from components cloned from Caliph's braincore. The original components had alien programming running through them. Flash has a theory that the sterilization process left behind fragmentary bits of the alien code. These little fragments of code occasionally and randomly interfere with ship's functions." Queequeg ran to a viewport and looked out into space, tail back, ears pointing forward.

"Why hasn't he told anyone?"

"He doesn't trust his theory. It explains the pattern of glitches, but has one major hole in it. If he's right, most of the glitches would be at the primary core, and there haven't been any there, only at peripheral systems. Still, he's a bright guy, and I think he is onto something."

"Should I talk to this Flash guy?"

"I better do the talking. You'd only embarrass yourself." Queequeg jumped from the desk ran toward the door. "See ya, I'm outta here."

"Where are you going?"

"Underneath all of the enhancements to my forebrain and cerebral cortex, I'm still an animal driven primarily by instinct. You've dropped me into a new environment that I have to explore before I can be comfortable in it."

"All right, just don't pee on anything."

"No promises."

"I mean it, kitty-cat. This is a starship. Not a litter box."

Queequeg looked back angrily. "Please, how else am I supposed to mark my territory?"

"Don't you have scent glands under your nose or something?"

"There are some places I refuse to put my mouth."

"Then just do what humans have done for countless centuries, tape cartoons to your door."

The cat made one last suggestion before disappearing into the ventilation system. "You know, you can always ask, you-know-who."

Keeler was about to tell the cat to mind his own business, but caught only a flick of retreating tail. He poured himself a glass of Arcadian brandywine, and saw that his hand was shaking. He commanded it to stop, and carried his glass toward his sleep chamber.

Off his sleep chamber was another room, intended as a second sleeping chamber for the commander's family. Keeler had no family to bring with him, no one living anyway. The chamber was dark, unfurnished, but not completely unoccupied. He stood outside the door, for a few moments, then opened it. It was dark inside. "So, what do I do, Old Ghost?" he asked the room, not thinking any one would respond.

An ancient voice answered him. "You launch."

chapter four

Pegasus – The UnderDecks

Warfighter Specialist Conda Taurus trailed two Watchmen through a kind of channel that automated

transport pods used to move gear from the cargo bays to the artifactories. This part of the UnderDecks was cold, and dark, and the atmosphere so thin they were forced to wear mini-rebreathers. Their job was to scan for human life signs, and her job was to cover them if any of those life signs were hostile.

"I hate this," said a Watchmen, a red-headed woman on reserve duty from the Environmental Systems Sector.

"I never realized how big this ship was," the other one muttered, a man from the Technical Core. "Or how ugly some parts of it were."

"There's no one down here," the woman said. "This is a complete waste of time."

"The Prime Commander ordered every deck searched," Taurus, a small tough woman, insisted. "This deck, and these sections, are our duty, and we're going to search them thoroughly."

Amenities Nexus

Matthew and Eliza Jane Change ate in silence, the morning of the launch. *She's probably too nervous about the launch for conversation, he thought. It's not because she doesn't have anything to say to me. It would be nice if she looked up. I wonder if she noticed I'm eating blue orbs, even though they taste like...*

Matthew's internal monologue was interrupted by the arrival of Flight Lieutenant Kyoto of the Aves *Susan*, and Flight Lieutenant Ironhorse, of the Aves *Kate*. "Driver, who's your new friend?"

Kyoto was a little older than Matthew, shared Eliza Jane Change's dark-hair and almond eyes, but with a stockier build. She had pursued Matthew from the day they had arrived on *Pegasus*, and, for a while, he had given her a fair chance. She was attractive and smart, but she treated him with a sense of entitlement that he found off-putting.

He introduced them. "Flight Lieutenant Eurydice Kyoto and Paul Ironhorse, this is Lt. Navigator Eliza Jane Change."

Eliza looked up from her breakfast, studied these new arrivals for a moment. "Pleased to meet you," she said, as though she were anything but, and returned to her food.

"Lt. Change is the ship's chief Navigator," Driver explained. "She'll be the duty navigator at launch."

"I've always wondered, how does navigation in hyper-space work?" Kyoto asked. "I mean, Navigation depends on reference points in time and space. Once *Pegasus* is in e-space, she has neither."

"It would take a week to explain," Change said sharply. "And I don't have that kind of time."

"Then let me ask you this," Kyoto persisted. "Can you use hyperspace to travel forward and backward in time?"

Change told them. "You can only move up and down in time, not forward and backward. I have to go." She picked herself up from the table, and left. Kyoto claimed her seat.

"Why did you do that?" Driver asked.

"Do what?" Kyoto tossed her hair.

"We were having a nice breakfast until you two came along."

"Leave me out of this," Ironhorse said, favoring only the hearty Sapphirean repast on his tray with his attention. Ironhorse was very tall, very strong, and carried the aura of a man who had life all figured out, and didn't think it was a very big deal.

"She's a Guilder," Kyoto left the rest unsaid, that Guilders were misfits, outcasts, or to use that most damning of Republicker epithets, anti-social. It was an obvious, but not-completely-spoken, slight, which Kyoto probably thought was subtle. "Do you know who she reminds me of? Flight Captain Jordan. Have you ever thought of pursuing her?"

"Flight Captain Jordan is married," Ironhorse muttered, not looking up.

"I thought she lived alone," Matthew put in, glad for the opening to steer the conversation away from Eliza. Jordan was a beautiful woman, untouchably beautiful, at least to mortals.

Ironhorse was stoic. "Flight Captain Jordan lives alone because she gave her love to man once and he hurt her."

"Who told you that?" Kyoto asked.

"No one had to tell me. A sensitive man can tell from the way she carries herself."

Driver was tempted to ask what a sensitive man would deduce from the way Eliza carried herself, but he refrained. He told himself it was because he did not buy into Ironhorse's aura of self-assuredness, but part of him knew that he wasn't ready yet to know about Change's inner life.

Pegasus – Primary Command/Main Bridge

On the day of the launch, Tyro Commander Redfire looked over the Command Center, where every station was occupied by a Lieutenant, in dress Odyssey Project uniform, not a Specialist to be seen. Lear was at the Second Station of the Inner Bridge, deliberately not looking at him. He had heard about the fireworks of the previous day, was sorry he had missed it, and wore a grin a hard kick to the groin could not have erased.

"All support ships cleared?" Lear barked.

"Affirmative," answered the Flight Control Officer.

"Field Generators Primed?"

"Confirmed, all Gravitational Propulsion Fields Primed and Enabled," answered the Duty Engineer.

"Hair combed, teeth cleaned, trousers latched," came a voice from the rear. Keeler strode onto the bridge. "Ho! Wait a second." He latched his pants and continued toward the command chair. He had also dressed for the occasion, wearing the uniform of an Admiral of the Commonwealth Fleet, from the time of the Ninth Crusade.

Lear looked at him with some faint disgust.

"What?" Keeler demanded.

"Why are you wearing that instead of your project uniform?" Lear asked, her tone a delicate compromise between respectful inquiry and scolding reproach. Cheeky, Redfire thought, so soon after "the incident."

"This is in honor of my ancestors, who fought and fell in battle defending the Commonwealth against the Adversary, the Abomination, and those other unholy names we gave those who lost the war," he proclaimed. "By extension it honors who served the fleets of Earth and the Commonwealth in millennia long past."

She looked at him gravely as he took his seat, but it was too close to launch time to get into an argument.

"Besides," he added. "These epaulets look *fabulous!*"

Redfire failed to suppress a tight-lipped smile. He knew this meant no one was going to ask him to take off his gloves again. Keeler activated a display, checking for reports of system glitches, and the results of the Watch's sweep of the ship for saboteurs, stowaways, and such. He came up dry on both accounts.

The Communications Officer, a handsome Republicer female, Lt. Daria Standard, spoke. "Incoming simultaneous transmissions from Corvallis, Sapphire and City of Alexander, Republic."

"Do they want to know if we want to change our interplanetary comlink companies?" Keeler asked.

The communications officer seemed momentarily confused. Unless you warned a Rep that a joke was coming, it tended to go right by them. "N-nay, sir. It's the president of Republic and the Chief Executive of Sapphire."

"Uh-oh," said Keeler. "Now, we're in for it. Put them on the side viewers."

The display in the forward part of the bridge was showing the last of the support ships pulling away. On the two side displays were the President of Republic and the Chief Executive of Sapphire, whose official title was "Leader Guy ."

"Good Morning, Mr. President," Keeler said to one, and to the other, "Hoy, Brian, how's your wife and my kids?"

The two leaders began to speak at the same time, before the Chief Executive of Sapphire demurred. The President of Republic continued. "Prime Commander Keeler, Executive Tyro Commander Lear, officers and crew of *Pegasus*..."

"That about covers everybody," Keeler muttered.

"The hearts and minds of Republic's people are with you on your journey. We will meditate on your success."

"Thank you, Mr. President, sorry you can't join us."

"Ranking William," said the Leader Guy. "Good luck. Our prayers soar with you."

"Za, right.... I mean, thanks, Brian."

"Any last words of wisdom for the folks back home?"

Keeler stood, raised his walking stick and shook it at the monitor. "Stay out of the liquor cabinet, and no parties! The planet better not be a mess when we get back."

"Gotcha," the Leader Guy said and made a finger-trigger motion.

Keeler ended with a traditional Sapphirean farewell. "Fear no evil."

The Leader Guy provided the traditional response. "God is near."

"Transmit off." Keeler regained his Prime Commander's seat. "Shall we blow this star system?"

Lear barked orders. "Comm, signal all crew to secure for departure. Navigator, confirm course heading. Helm, full ahead on my mark."

She was answered with three rapid "Affirmatives."

Keeler brought up a display on the arm of his chair that gave him fingertip neural link access to any panel or monitor on the bridge.

"All stations report enabled," Lear ordered. Her own excitement was palpable.

"Navigation enabled." Eliza Change as a full set of interfaces began to assemble around her. Every station on the bridge used this technology as the fastest link to the system each crewmen monitored. However, the Navigator required maximum integration, to enable her mind and the ship's mind, the artificial intelligence housed in the BrainCore, to operate as one. Sensor gloves grew over her hands, and a visor across her eyes. Tendrils of dark plastic material wrapped around her arms and legs, and traced the nerves of her neck and spine. Redfire watched Keeler staring in fascination – and perhaps revulsion – as the ship's molecular knitters built the technology around her.

"Helm enabled," Reported the helm officer, looking at Eliza nervously, perhaps glad his station required only a discreet ridge of interlinks around his right eye, cheek, and chin and on the back of his left arm.

"Tactical enabled." Redfire reported. His face was clean, as were Lear's and Keeler's. Not having interfaces knitted to the face for each duty shift was a privilege of rank for which the captain seemed relieved.

"All outer bridge stations report enabled," Standard confirmed.

Lear looked at Keeler, who gave her a nod. "Helm, take us out," said Lear.

The Helmsman, made a gesture as though he were folding something in the air with one hand. Far below, the fore and aft Gravity Engines throbbed to life, unleashing energies that would have paled mighty suns. Around the ship, space and time began to warp, to curve, swelling into waves that pushed the ship along as it rode atop. *Pegasus* surged forward. 1,000 kilometers away on either side, the unfinished *Republic* and *Sapphire* sent out laser beams as though to guide the ship on its journey into the cold eternal night.

Redfire watched his tactical display as the shipyard and the unfinished Pathfinder ships behind him rapidly disappeared. He noticed the commander had fixed his own attention, not on the ship's course, but on his arm display, which was showing System Status.

He's still worried about the glitches, Redfire thought. But as the ship accelerated, every system appeared to be running perfectly.

"Report, Navigator." Lear ordered.

"We have cleared the outer cometary belt and are still accelerating, now at .015c," reported Lt. Navigator Change from beneath her veil of technology.

"How long is the voyage to Meridian?" Keeler asked.

Change answered. "Meridian is 83 ly from the Republic system. Approximately .83 ly in e-space."

Figuring in an acceleration constant for n-space and e-space ... if we catch a swift current, including ramp-up and braking time, approximately 33 days in transit. In the time it takes us to reach Meridian, nearly eight years will pass on Sapphire and seven on Republic."

Keeler looked thoughtful for a moment and then relaxed, "Thirty-three days, hm, we ought to have a mixer, to get to know each other."

Pegasus – Avalon Ballroom

The mixer was held a few nights after launch, scheduled to correspond with *Pegasus's* transition into hyperspace. Keeler had chosen to make his mixer formal, in salute to the occasion. Looking out across the multi-leveled expanse of the ship's largest ballroom he felt gratified. Like all of the ship's ballrooms, Avalon was named for a colony-world on *Pegasus's* itinerary. Its designers hoped it would be the site for receptions of planetary dignitaries, where treaties, agreements, and memoranda of understanding would be signed. Keeler liked it better as it was tonight, the place where his crew was having a good time.

Light glittered off chandeliers and cut-crystal dinner services. The parquet floor glowed softly golden. Stars twinkled in a hologram sky. The scent of sweet flowers wafted through the room on ventilator breezes. A popular Sapphirean melody swelled across the dance floor, sending the well-dressed men and women of the ship's company into motion. Gleaming gold and silver and/oroid waiters hefted trays of drinks and food through the happy crowd.

Keeler didn't dance. His customary role at this kind of function was chatting up and shaking down alumni and benefactors for donations to the Chancellor's Fund. The crew were having a good time, but his attempts to mingle had resulted in them awkwardly reporting on the status of their section. He supposed it was hard to relax and cut loose when the captain was on the floor. When Tactical Tyro Commander Redfire approached him, he was acquainting himself with one of the buffet tables, which had proven a much more congenial companion.

"Good evening, Commander," Redfire greeted him. "Fearless bash."

"Returning to the stars is a fit occasion for celebrating. A thousand years was far too long." Keeler answered, taking a drink from an and/oroid waiter, juggling his walking staff from one hand to the other. "Do you find it interesting, in both our ancient past and our more recent present, it took a gift of alien technology to enable us to move into space? According to some legends, Earth only developed spaceflight technology because of the crash of an alien spacecraft in a desert, somewhere."

"Even without Caliph, we would have made it back eventually," Redfire said.

Would we really? Keeler wondered. "Oh, look, there's Tyro Commander Lear. I have to speak with her. Will you come?"

Keeler and Redfire moved through the crowd to a corner of the dance floor where Lear, resplendent in her full dress uniform with its impressive display of service medals stood next to her husband, a tall, sturdy man whose black hair was flecked with iron gray. "Good Evening, Tyro Commander," Keeler said cordially.

"Excellent party, Prime Commander," Augustus Lear replied graciously.

"Indeed," Goneril Lear agreed.

"Somewhat subdued for my tastes," Keeler continued. "I mean, so far the only frontal nudity has been tasteful. I wanted you to know, Tyro Commander, I have met with all the department heads on the dress code. A great bunch of guys, with one or two exceptions." His eyes slid sideways to Redfire, who was biting his lower lip as if he knew something was afoot.

Tyro Commander Lear didn't. "And you thought that was going to be such an odious duty. You see, commander, we established procedures long before you came aboard, and once you look at the way we do things, and the reason we do things the way we do..."

"Exactly!" Keeler exclaimed. "Procedures and the way we do things were exactly the topic of discussion at the meeting. We took a good long look at the Standard Procedures manual, decided it was really stupid, and voted, 18 to 2, to just throw the whole thing out."

"You voted to throw out our entire Manual of Standard Procedures?" She was nearly strangling on her incredulity. "Those Procedures were agreed to by the Republic Odyssey Directorate and the Sapphire

Odyssey Project Affiliate. You can't throw them out."

"The Odyssey Directorate is 100 billion kilometers that way," Keeler said, pointing his staff toward the rear of the ship. "We're going to set up our own Procedures Committee, including a Stupid Procedures Sub-Committee to do the actual... er, throwing out. They will meet, uh, once a week until we get rid of all the stupid procedures. As for the uniforms, we decided how the crew dresses was beneath my threshold of interest as ship's Prime Commander."

Lear shook her head and waved her arms slightly before locking them on her hips. "Are you playing politics with me?"

"Politics!" Keeler answered. "Please, there is no reason to be vulgar. You know, on my planet, we don't have the p-word. We consider the end of the... p-word to be our highest achievement, on a par with the time ancient humans invented plumbing, and to the similar end of eliminating something foul, odorous, and unhealthy from our presence."

"Goneril," said Augustus Lear, taking his wife by the arm. "They're playing the 'Minister's Waltz.' Shall we dance? Excuse us, Prime Commander." He gently pulled his wife toward the dance floor.

"There goes a brave, brave man," Keeler said.

Redfire grabbed a glass of wine from the tray of an automech and raised it in salute. "Well played."

"Too easy," Keeler responded. "Oh, look, Tialkal, the Sumacian Holy Man. I wonder if he's heard the joke about the Saintist Prophet, the Iestan Counselor-Priestess, and the Sumacian Holy Man who were crossing the Nef Desert in a buzz-car..."

Redfire's face suddenly lost all expression. "Excuse me."

"Oh, you've heard it before?"

"Neg," he said. He began to walk, then turned back. "I'm sorry. Someone just came in who I ... don't want to talk to just now."

Keeler turned around. The only one walking away from the entrance was a statuesque blond woman in a Flight Captain's uniform. He was about to josh Redfire that he couldn't possibly mean her, but when he turned, his Tactical Officer was beating a hasty retreat toward a side exit.

Matthew Driver was standing by himself near a table at the side of the ballroom, eyes fixed on the entrance. A hand touched his shoulder. "Good evening, handsome," said a husky female voice.

He turned to see his sister, standing next to her semi-husband, Lt. Cmdr. Morgan, the Chief Science Officer. "Don't look so disappointed," Morgan said.

"How are you, Matthew? Still looking for that Sapphirean girl?"

"She's a guildler, and I am looking for her."

"Aye, a guildler, my mistake," Kayliegh said. "The ship's navigator?"

Matthew nodded. He saw a flash of dark hair, pulled back in a pony-tail. Not her, just a trick of the light. "You would think it would give us something in common, but..."

"It doesn't?"

"It does, but since we both know about navigation, there's nothing we can talk about that we don't already know. I tried to talk about the control systems on mining ships, but she's... she doesn't like to talk about mining ships."

"Imagine that." Unlike her brother, Kayliegh had never had any difficulty with inter-sexual relationships. "Have you shown her *Prudence* yet?"

"I was thinking maybe tonight." *Wait a second. Over there, next to the walk-in salad bar.* She disappeared inside, but he could tell it wasn't her. Too tall, the wrong walk. "You don't think it's too soon. I only met her five days ago."

"I think you should," Morgan said. "I don't think I ever would have had the steel to talk to Kayliegh if not for those late nights in the Climatology Laboratory."

Kayliegh blushed. "If she says nay, don't be alarmed. There will plenty of time on this voyage to work with the legendary Driver charm."

"Excuse me," Driver said, walking away. This time, it was Eliza, no mistaking. He cut through the crowd, making for a place near the main exit where she was standing. He tracked from the main exit toward the dance floor without seeing her. He tracked the other way toward the buffet table. He thought he saw her

"Lt. Driver?" someone asked.

He turned to the voice. It was Flight Lt. Kyoto. She was handing him a beverage, which he took and drank without tasting. He realized she was asking him something. "I'm sorry, what?"

"Are you going to join the rest of the Angels on the observation deck for the transition?" She and Matthew both belonged to Flight Group Gamma, nicknamed the Quicksilver Angels

"Oh, uh, I haven't decided."

"Are you looking for somebody?"

"Sort of..."

She looked disappointed. "I'll save you a place."

He turned to the buffet table, caught a glimpse of Eliza. He was sure it was she. He pushed his way urgently through the crowd again. By the time he reached the place she had been standing, she had moved on again. He scanned the ballroom again.

There she was, at the entrance again, carrying a large food basket and, he saw to his horror, walking out of the ballroom with another man.

Pegasus – Mediplex Four – Deck 14

David Alkema gingerly balanced himself on one leg while carefully drawing the injured one from his recovery bed. Carefully, he lowered it to the floor, feeling like thousands of tiny needle were pricking it. Gingerly he tried putting weight on it. The needles became knives, stabbing through his shattered knee. He bit down hard to keep from screaming.

"And where do you think you're going," said the physician-on-duty, a younger-looking-than-he-actually-was Medical Specialist called Jersey Partridge, appearing suddenly from the forestation.

Alkema grimaced. "No where... just seeing if I could walk yet."

"Not for another five days, minimum." Partridge was thin, with straight brushy hair cut short around a handsome-enough, albeit slightly pug-nosed, face. He wore a MediCore jacket, which was dove-gray trimmed in sky-blue, and softer than the normal crew jackets.

Alkema glared at the brace on his leg. "I slept through the launch because of this leg. Now, I'm going to miss the Transition Ball."

"If you had stayed in bed, per instructions, you could have attended the Transition Ball, although I doubt you'd be dancing." He offered a shoulder to support Alkema, and helped him back into the healing bed. "Unfortunately, you got out of bed, tried to stand on your leg, re-broke your patella and tore ligaments besides." His tone was sympathetic, not admonishing. Still, Alkema did not answer, but crossed his arms and laid back petulantly against his pillows.

"If it makes you feel better, I'm also missing the Ball. But, I'm having wine and food sent up from the Ballroom. We can toast transition from here." He ran a medical scanner over Alkema's leg. The muscle grafts the ship had built were taking hold, but were not nearly strong enough yet. "No dancing, though."

Alkema felt a little guilt. It was not Partridge's fault he was in this condition. He tried to smile. "That's all right. I've never been much of a dancer anyway."

"I could dance *for* you," Partridge suggested in a tone so perfectly pitched Alkema could not tell if he were kidding or not.

"Ah... you could," Alkema answered. "But I'd prefer you didn't."

The UnderDecks

Eddie and Eliza had escaped the party with two bottles of Carpentarian Grigio, a plateful of canapés, and a basket of dinner rolls and headed for *Pegasus's* UnderDecks. The UnderDecks housed the enormous

machinery, conduits, and power-substations that serviced the gravity engines, artifactories, and recycling plants still further below; all of it built to the scale of giants. Their surroundings were organic composite and functional, throbbing with the lifeblood of the ship. Down here, the ship was itself, no plants, no garden-parks, no sculpture, no amenities.

The acoustics were marvelous. A soundbox blasted raucous Carpentarian bar music. Eliza Jane sat across from him. "So, what's this pilot like?" Eddie asked.

Eliza Jane shrugged and chewed a mushroom-like pod stuffed with yellowish cream. "Nice, in a socially-inept sort of way."

Eddie rested against a cold-water conduit. "I've seen him in the landing bay. In my opinion, these three-way marriages never work."

"He's not married."

"Neg, but so deeply involved with his ship, I think he sleeps with it. If he ever finds the tritium-fuel intake socket, it's all over."

"At least he eats breakfast with me, Eddie."

"That's an afterdawn meal isn't it?" It would have taken Divine Intervention to get Eddie out of his bunk before 1400 hours. "Anyway, the food on this ship bites worms. I mean, it's all thinker chow, not what a working class assol• from southeast Halifax is used to. They should have found space for a Slam-n-Jam or a Burger Bunker. I miss real food." He paused in complaining about the food to shove a large meat sandwich into his mouth. Still chewing, he asked. "If you like him so heli-much, why didn't you invite him here?"

"I didn't see him in the ballroom. Maybe he didn't show." Eliza raised her head and looked around. "Are you sure we're alone?"

"Za, why would anybody want to come down here?"

Eliza nodded and took a sip of her wine, but she could not escape the strong, uncanny feeling they were being watched.

The Avalon Ballroom

The music was stilled. The celebrants gathered around a projection of *Pegasus*, flying through space. Precisely at midnight, exactly when Lieutenant Navigator Change had calculated, *Pegasus* achieved 55c, transition speed. A few seconds later, a tightly-stitched energy field projected into an adjacent set of dimensions. A wormhole formed directly in front of the ship. Beautiful curves and parabolas of light and energy, surrounded *Pegasus* like a sailing ship in a full wind. With the sail extended, the ship was pulled into another universe.

In the moment the threshold was breached, the space around the ship filled with brilliant light as though every star in the universe suddenly exploded and penetrated *Pegasus's* thickly shielded decks. It would not be precise to say that the crew was blinded. Rather, for a thin moment, everything around them became pure white light.

When it passed, Keeler noted that his chronometer had stopped, as had almost every timepiece on the ship. "Impressive." he said.

chapter five

Hyperspace

From the Sapphorean Writ of Common Wisdom

Hyperspace is the ancient name for a brother universe, born of the same Big Bang. It is also known as e-space, with our universe known as n-space. Hyperspace is highly

chaotic, without stars, planets, or physical laws. The dimension of time is smaller in hyperspace, therefore, hyperspace expanded more slowly. Although every point in hyperspace corresponds to a parallel point in our universe, hyperspace is only about 1% as large.

These properties greatly facilitate point-to-point travel if a trip passes through hyperspace, entrance to which requires warping space to form a “wormhole” around the ship. There are two tricky parts to using this shortcut. One is, any ship passing through must be insulated, that is, it must create a pocket of n-space around itself in order to keep from flying apart in the absence of gravity and the weak and strong nuclear forces to hold it together. The other challenge is navigating without four-dimensional reference points. Without precise navigation, a ship may emerge from hyperspace thousands, or even millions, of light years from its destination. The ship could, theoretically, emerge millions of years in the past or future if exit is not timed carefully.

The Pathfinder ships meet the first challenge by surrounding themselves with energy sails, that both allow the ship to be propelled through hyperspace and insulate it from the hyperspace universe.

For the second, each Pathfinder ship has two models built into its navigational braincore, one of our universe, one of hyperspace. It uses inertial guidance to determine its course and position in hyperspace. However, even with artificial intelligence, a ship’s navigator, people who possess rare skills and gifts, is essential to successful hyperspace transit.

Pegasus – Hangar Bay

Prudence streaked through a green sky in which a dawning orange sun was burning red highlights into banks of blue clouds floating high above a forest of yellow trees. The Aves bore westward, past the dawn into night, passing over a large emerald lake as it crossed the twilight, heading dead on toward a distant range of black mountains.

“Enjoying yourself?” Driver asked the beautiful woman in the second seat of the command module.

Eliza Jane Change She looked out over the landscape. “Interesting game.”

“It’s not a game, it’s a training simulation produced on Sapphire, one of 14,000 in our database. They have names like Storm World, Snow World, Mech World...”

“What do they call this one?”

“Bad Color Scheme World.” He shrugged, but he wasn’t the one who named it. *Prudence* entered the mountain range. “Hold on.”

At approximately three-and-a-half times the speed of sound, *Prudence* banked right and dove steeply into what the Sapphirean *weldmachers* had named, ‘The Canyon of Doom. Rough granite walls rose up on either side of the speeding ship, their sides only a very, very small number of meters away from *Prudence’s* wing tips. Driver hit the ship’s searchlights to show her the huge boulders strewn on the simulated bottom of the canyon.

The Head’s Up display was crowded with red terrain warnings. A wall came closing in. Just as Change saw it, Driver flipped *Prudence* down a side canyon and into a pitch-black tunnel in the rocks. Halfway through, Driver had to bring the ship straight up onto its back to make it into an escape tunnel that rose up through the cone of an extinct volcano. He traced the ship around the inside of the caldera until his sensors located a narrow tunnel that required him to fly *Prudence* on her wingtip to make it through.

"You may be wondering why I didn't fly out through the top," Driver said.

"Why?" she asked without a lot of enthusiasm.

"The designer put in a false escape route. If you try to fly straight up, you'll collide head on with a flock of... some kind of dragons."

The tunnel broke back into the main canyon. Almost immediately, *Prudence* was confronted with a series of rock bridges which she had to maneuver over and under.

"This is the first really hard part of the course," he said. "I used to be unable to handle it at all without the terrain avoidance system." He wondered if the lady was impressed. *Of course, she's impressed*, something inside him answered. *Do you think that guy she left the party with can navigate an Aves through the Canyon of Doom?*

She brushed her hair back and stared disinterestedly through the canopy. "So, is this what you guys in the Flight Groups do in hyperspace? Play games?"

Something inside him smiled sheepishly and slunk off somewhere else. "It's how we maintain our flight skills." He pulled *Prudence* up and out of the canyon. "Would you like to take over the controls?"

"Negative, thank you."

"Why not? Surely you're checked out on the Aves?"

"Of course I am. I just don't have an inclination to fly... and I don't care much for simulations. The real things in the universe are difficult enough to deal with."

It finally sank into Driver that Eliza was just not loving this as much as he did. "End simulation," he said. The holo-projection of Bad Color Scheme World disappeared from the canopy, replaced with the non-simulation of *Pegasus's* hangar bay. The sense of motion disappeared. The control gear around his face retracted and vanished. He turned to her. "Is there something else you'd like to do?"

Eliza rose. "I better get back to my quarters. I have to brief Executive Tyro Commander Lear on Navigation."

"I'm sorry you didn't enjoy it more."

She shrugged. "Like I said, I don't like simulations Breakfast tomorrow?"

"I'll be there," Matthew said, rising to escort her to the hatch. So far, the renowned Driver charm was not getting him any closer to her.

Pegasus – Prime Commander Keeler's Suite

During the hyperspace run, Keeler made only cursory inspections of the Main Bridge. Most of the crew attributed this to lack of interest. Hardly anyone suspected how much Keeler fretted, or how much time he spent in his quarters or his Command Suite, nervously pacing, mixing drinks, practicing chip shots with his walking stick, mixing more drinks and pacing some more.

Keeler fretted over what would happen if a glitch caused *Pegasus* to lose its navigation or insularity fields in hyperspace. If any of the ship were exposed to raw hyperspace, even for a moment, it would collapse from the quantum level upward, leaving a trail of sub-atomic debris as ship and crew evaporated to nothingness.

Nine days into the hyperspace transit found Keeler anxiously monitoring the capacity utilization readings for the central AI braincore. Thus far, It had been averaging 93.7% with spikes into the 98% range. Navigating in hyperspace, tacking the sails to the energy currents, and maintaining a pocket of normal space around the ship were complex tasks demanding considerable braincore resources.

"More resources than anyone thought," Queequeg reported. "The design specs called for about 80% system use in hyperspace with spikes to 83-85%."

"Is that serious enough for me to start and/or stop drinking?" Keeler asked his cat.

"The models probably underestimated how much capacity was needed to navigate and maintain structural integrity in hyperspace. Also, *Pegasus's* artificial intelligence is designed for continuous self-upgrading through the use of heuristic algorithms."

"You know, you really haven't lived until you've heard your cat talk about 'continuously self-upgrading heuristic algorithms.'"

The cat flicked its tail. Enhanced felines had shown a surprising affinity for technobabble. "We may be able to grow more processing capacity before the next run, but I don't think it will be necessary. The ship is in a learning cycle. It has never been in hyperspace before and it needs more processing capacity. Next time, it will know how to process more efficiently."

Lear Family Suites – Pegasus

Twenty-two days into hyperspace, Goneril Lear was in her family's suite once again reviewing the archival file on the Meridian colony. This file was a synopsis of fragmentary data recovered from the ruins of the City of Testament after radiation levels subsided .

MERIDIAN:

FOURTH PLANET OF EIGHT. SYSTEM DESIGNATION 10 122 PEGASI.
DISCOVERED AND SURVEYED: SOLAR YEAR 3882. FIRST COLONIZED,
SOLAR YEAR 4293.

GEOPHYSICAL PARAMETERS:

NOT AVAILABLE. BELIEVED TO BE WITHIN TERRA CLASS PRIMARY
RANGE.

SURFACE CHARACTERISTICS:

NOT AVAILABLE. BELIEVED TO BE WITHIN TERRA CLASS PRIMARY
RANGE.

KNOWN HISTORY:

THE CONTRACT FOR DEVELOPMENT OF THE MERIDIAN COLONY WAS
WON BY THE PAN-ATLAS OUTWORLD DEVELOPMENT CONSORTIUM.
THE CONSORTIUM CHOSE A MODEL EMPHASIZING THE CREATION OF A
SUSTAINABLE AGRICULTURAL BASE AS THE FIRST PRIORITY,
SUGGESTING AN INTENTION OF LONG-TERM HUMAN HABITATION...

In stark contrast to my own world, Lear thought. Republic had never really been "settled." As a marginally inhabitable planet, it might have been a candidate for colonial terra-forming but for the wealth of minerals and chemicals on its surface; in particular, Element 151, a rare substance vital in Colonial Times as a catalyst for creating anti-matter. Instead of towns and farms, Republic was dotted with gigantic Extraction Facilities, Refineries, and Peripheral Support and Inhabitation Complexes. Her family name, Lear, was derived from one of the old Commonwealth Industrial Combines that had set up shop on the surface of Republic, into whose service some ancestor had pledged herself. She continued.

Last contact:

TACHYON PULSE MESSAGE RECEIVED AT REPUBLIC, OLD CALENDAR, PERIOD 9, DAY 11,
5856 A.P.R. TEXT FOLLOWS:

*(garble) ... outpost of... We are in... (garble)... assimilation (?) ... gathered
in Point Ewain (believed to be the name of a city)... our lives... (cut off)*

*This has been variously interpreted as an attempt to communicate with
other human worlds, a news report, and a distress call. Analysts have been
unable to reach a conclusion.*

The date corresponded to within a century of the dawn of the Great Silence. When Republic had been cut off, it had survived on agricultural shipments from Sapphire for about a century, and when those stopped, had to rely on the meager output of its own greenhouses, and those few edible forms of native life, aquatic, protein-rich Tagger Pods especially. Little wonder its society had descended into six centuries of war.

She read on. Under previous contacts, reports from the tachyon communication network were listed, but Meridian had been a sparsely populated agricultural world, and there was little news. There were two reports of ships arriving with workers from Meridian, most of whom returned to their home planet after their term of service.

A Modeling Study Report, produced by the Odyssey Project Subdirector of Colonial Development Studies, contained several thousand lines of statistical analysis explaining the relationship between population, agriculture, and technology. The conclusion the analysts had reached was not particularly

useful:

MERIDIAN'S POPULATION IS MOST LIKELY TO BE DISPERSED AMONG SUCH LOW-DENSITY AGRICULTURAL COMMUNITIES WITH FEW, IF ANY, EXCEEDING 100,000 IN POPULATION. TECHNOLOGY MAY BE EXPECTED TO BE APPROPRIATE TO PLANETARY NEEDS. TOTAL ESTIMATED POPULATION, 900 MILLIONS TO 1.2 BILLIONS.

Lear pondered this for quite some time. What could Republic offer a “widely dispersed agrarian culture? What would such a culture want? Technology? Medicine?

“Mother?” came a voice. She turned to see her two sons standing in the division between her study and the family area of her quarters.

She smiled at them and dimmed her reader. “Come in.”

Marcus, the younger, was ten. He ran first into the room. Trajan, twelve and prematurely blooming into a sullen adolescence, hung back. Her children were strong and beautiful, and she was proud of them. Marcus took after Augustus, with his dark curls and creamy skin. Trajan, with his honey-blond hair, green eyes, and full lips reminded Lear of her own father.

At the time of their conception, Lear had questioned the wisdom of bearing sons. Part of her had wanted a daughter, but she knew that her military career would keep her away from home too often and that Augustus would be the primary parental figure, so boys were the logical decision. However, she was not too old to bear a daughter. The thought had been much in her mind of late. She put it aside.

“Are you done working?” Marcus said, putting his arms around her neck.

“I can study those boring old files later. How are you? How is school?”

In the manner of children through the millennia, her boys answered indifferently. “School’s tolerable.”

“How do you like studying with Sapphireans?”

“They ask stupid questions,” Marcus said.

“They do, do they? What kind of ‘stupid questions’?”

“I don’t know. When we read stories, they want to know if they can change the ending. Stupid questions like that.”

She looked to her other son. “What about you, Trajan? What do you think of the Sapphireans?”

“They never teach us any facts,” Trajan groused. “They give us questions and expect us to find the answers. Then, they argue about whose answer is best. It doesn’t make any sense. Why don’t they just teach us what the facts are from the beginning?”

Lear sighed. She would have to practice Trajan in tact. She pulled her boys toward her. Trajan pulled away, rolling his eyes. “It’s not what makes us different that’s important,” Lear their mother told them. “It’s what have in common. We have to live together on this ship and get along.” Or such was the official line of the Odyssey Project Subdirector on Moral and Cooperation. *Keep saying it, sooner or later it will be true*, she had always been taught. “Remember, living here is harder for them than for us. On Sapphire, you can go anywhere you want, and you don’t even need a re-breather pack.”

“But this ship is so big, and there are hardly any people on it. The Sapphireans should have plenty of room” Marcus said. “The teacher said there were less people on this ship than in one tower of the Jacet Complex in Alexander.”

Trajan winced upon hearing the name of their home address. Lear knew Trajan had not been happy with life onboard *Pegasus*. He had not even wanted to come and had even tried to run away the day they were to depart, intending to stay with Goneril’s sister, Cordelia.

“That is true... and the Sapphireans are different,” Lear said, brushing Marcus’s hair with motherly affection. “These Pathfinder ships had to be altered to accommodate them. We had to add open spaces and gardens. Sapphireans love to be outside and expose their skin to solar radiation, and so we couldn’t build as many as we would have liked...”

She caught herself. She had not meant to editorialize to her children. “They have their own ways. But

if you ever find anything they do unusually strange, just smile and ask them about it. Be open to them. We're going to see many new worlds on our journey, worlds with people who are even more different."

She rose, "So, who'd like some soy gelatin? I'll have unflavored."

"Chocolate-mint-coffee-and-cream," Marcus said with gusto. He was a kid who knew what he wanted.

Lear looked expectantly at Trajan "I'm not hungry," he said and slunk off to his room.

"Why is Trajan always so anti-social?" Marcus lamented.

"Don't say such terrible things. He just needs to adjust," Lear told him. "Let's get that soy."

Keeler's Quarters

After twenty-eight days in hyperspace, Keeler chose to initiate Redfire in one of his favorite mentally-challenging past times: playing simultaneous games of what ancients might have recognized as chess, checkers, backgammon, and Yahtzee. "That's 26 for 4 of a kind, knight threatens bishop, and king me, dammit."

Redfire looked from board to board, with a face of utter confusion. Maybe, Keeler reflected, he shouldn't have initiated Redfire into this exercise while playing for shots of tergiversate – an alcoholic beverage from Sapphire's Carpentaria continent distilled from fermented tree sap – at the same time. Redfire picked up the backgammon dice and began shaking the small oval cup.

"So, tell me, Tyro Commander, how have you been occupying your time since we entered hyperspace? As there are no tactical situations to resolve, I trust you've found other ways to amuse yourself."

"I've been experimenting with a new art form. I call it, 'creative historical revisionism.' I alter the variables of historical events to produce an artistically meaningful outcome."

"What kind of historical variables are you talking about?" Keeler jumped two of Redfires pieces. "King me. Three shots."

Redfire felt his stomach lurch at the thought of more alcohol. The problem with this game was, he realized, that once you began losing, you tended to keep losing. "For example, if the Altus Cthulu volcano had erupted before the Thean siege instead of after, 80% of Sapphire's population would have been rendered sterile by the White Plague, instead of 20%."

"Those events were more than five hundred years apart. How can you possibly hypothesize how one would affect the other?"

"Isn't that the appeal of history; how the interaction of tiny variables producing grand events?"

"Not really," Keeler took a sip of wine. He had heard the nostrum about "wine and liquor, never sicker," but had always assumed it didn't apply to him.

Redfire rolled the dice, moved three disks, went on to the checkerboard where he jumped one of Keeler's pieces. "Shot."

"Don't mind if I do." Another shot went down. Upon recovering, Keeler relaxed. "You know, the ancestor who founded my line came to Sapphire about the time of the White Plague. Lexington Keeler, Admiral of the Commonwealth."

"Is that why he started New Cleveland far out in the wilderness, to avoid the plague?"

"Neg, he started New Cleveland colony because he wanted to have a good time and didn't want anyone to bother him. After he chased the last Adversary out of the galaxy, his ship was nearly destroyed. He put himself into stasis to survive, and his ship took 300 years to limp back into civilized space. After the parades were finished, he just wanted to drink, enjoy the pleasures of women, and otherwise be left alone. So, he founded the artist's colony at New Cleveland, named, no doubt, for one of the magnificent cities of Ancient Earth."

The com-link at his desk was flashing. He touched it and was met with the stern visage of Executive Tyro Commander Lear. "Good Evening, Prime Commander. Have you had the opportunity to review the cargo manifest reports?"

"Za." It was true. She was only asking if he had had the opportunity, not if he had actually reviewed

them; a key distinction.

"Did you sign the agro-botanical harvest projections?"

"I did."

"Did you read them?"

"Read what?"

She glared. "The responsibility for commanding this ship goes far beyond sitting in the command chair and giving orders."

Actually, from Keeler's perspective, command was about sitting in the command chair and giving orders. "Did you review those reports?"

"Affirmative."

"Then, I trust your judgment, Keeler out." He closed the channel, and addressed the boards. "Knight takes pawn, and I'll take 20 for fives, securing my bonus. Drink!"

The cat access hatch slid open, and Queequeg bounded through it like his tail was on fire. "Where have you been for the last three days?" Keeler demanded.

"No where," Queequeg answered, halting and recovering his cool instantaneously. He flicked his tail, and settled back to lick his paw.

"And what were you doing?"

"Nothing!"

Redfire cocked his head. "You must be the Commander's cat."

"You must be the guy who makes obvious observations."

"I hear you're quite good accessing secure data networks, like the Tactical Systems."

Queequeg looked at Keeler. "Did you tell him that?"

"Of course not." Queequeg developed a sudden interest in licking the fur of one leg.

"There were paw-prints all over the data-channel, leading right back to your master's quarters."

"It wasn't me, it was Flight Commander Collins's marmalade," Queequeg insisted. "You can't trust marmalades, sneaky devils, little black spots on their lips."

"Whose idea was it to give them speech organs anyway?" Redfire pondered aloud.

"Another one of my ancestors," Keeler sighed. "On my mother's line, but that's a story for another time. King me!"

chapter six

***Pegasus* – Primary Command/Main Bridge**

"Inverting light-sail geometry to braking configuration," Lt. Jesus Powerhouse, the helmsman, called. Young, dark skinned, and over-muscled, with a shaved head, Powerhouse did double-duty as an Odyssey Warfighter and triple duty wiping the floor with anyone who challenged him in Recreational "No Quarter," a milder: version of traditional Sapphirean martial arts combat.

On his display, the great energy fields around the ship reversed direction and polarity. Without a sound, without a sense of deceleration, *Pegasus* dropped below light-speed and prepared to transition out of hyperspace. Keeler and Lear were at the Inner Bridge, seated behind Lt. Navigator Change. Redfire stood off to Keeler's right, hands crossed behind his back.

"Sub-light velocity. Retracting light-sails," called Powerhouse.

"Acknowledged," Lt. Navigator Change was surrounded by holographic charts. Numbers flowed past her, bright blue, turning red as they fell toward zero.

On the display, the energy fields drew in around the ship. "Sails retracted. Gravity Engines on-line.

Speed decreasing to transition,” reported the helm officer.

“Transition in ...5... 4... 3... 2... 1... Transition,” Change reported.

Pegasus fell to one-half light speed. A beam of particles, hyper-gravitons and even more exotic mutants from the quantum bestiary, shot out from the ship to create a wormhole immediately ahead of it, a temporary fissure between dimensions, a gateway between universes. A second later, *Pegasus* flew into the rift, which collapsed and sealed behind it.

Inside the ship, there was a black flash. They were through.

Keeler released his grip on the side of his command chair. “I think we made it.”

“All Cores, all Sectors reporting in. No adverse effects from transition. 100% operational.” Lear seemed satisfied for once. “Position report, Navigation?”

Lt. Navigator Change directed her attention to the star chart at the forward bridge. “We are 3.9 light days from a G-type, single star system, oblique to the plane of the system, 75 degrees.”

Lear was beaming. “The simulations forecast a 90% probability we would transition more than 30 light days from the target. The navigational software functioned spectacularly well. I think commendations are due to the Astrogation Core.”

The hard set of Change’s jaw showed how little she agreed with the credit Lear gave to the navigation software.

“Send tachyon pulse transmission to the Homeworlds,” Keeler ordered. “We have arrived.”

Lear turned to him. “Isn’t that a little vague?”

Keeler thought for a moment. “All right, tell them, ‘Having a good time. Wish you were here. P.S. Hyperspace radiation caused less than one percent of the crew to transform into hideous mutants who feed on the soft pink flesh of the living.’”

“No one has been transformed into a hideous mutation.”

“Like I said, less than one per cent.”

Lear set her jaw and conceded defeat. “Send the original message. I’ll draft a report to follow. Shall we direct our peace and friendship message to the planet?”

Keeler hesitated. To be honest, he would have preferred to wait until he was certain Meridian’s inhabitants were also peaceful and friendly, but he conceded. “Initiate peace and friendship message.”

Specialist American activated the message: “People of Meridian colony, this is the Pathfinder Ship *Pegasus* from the human colonies of Sapphire and Republic. We approach in peace and friendship.”

Planetology Lab — Deck 94

For three days, *Pegasus* maintained a steady course, gradually decelerating to one-quarter light speed. The photon receivers, electromagnetic energy receptors, neutrino detectors, and other instruments on her lower hull mapped the nearby star system, spotting planets, measuring their orbits and the composition of their atmospheres and surface.

Cultural Anthropology and Hermeneutics labs listened for electromagnetic whispers from the planet’s communication net (if it had one), from which they might extrapolate cultural structures and languages for programming the Lingotron translation modules that would allow the Landing Party to communicate with “the Merids.”

The Medical Labs stood by for data that would help them prepare vaccines to protect the Landing Party from any exotic diseases and allergies native to Meridian, and vice versa.

When the sensors confirmed a warm, wet breathable atmosphere on the fourth planet, four gates opened in *Pegasus*’s bow, releasing a company of probes, long thin darts with points at the tip and three large fins on the rear. They sped toward Meridian at almost half the speed of light.

Seven decks below Primary Command, Kayliegh Driver, designated spokesman for the geological Survey Core, briefed the Command Staff and Core Chiefs. The review was simulcast throughout the ship. Other sectors – botany, linguistics, Warfighters, flight core – met in their individual sections.

The Planetology Lab was a large round amphitheater with walkways surrounding a round area in which a ten-meter diameter hologram of the planet below was projected. This permitted the officers to

walk around the planet at an equatorial latitude. Meridian appeared as a large green planet tinged with grey-blue clouds. At first glance, it looked a little like Sapphire seen through a bad color filter, but where Sapphire contained a collection of continents separated by oceans, Meridian was dominated by one great Pangea attended by satellite islands of various sizes.

"We've mapped 86% of the surface of the fourth planet to a resolution of four kilometers and have identified ten areas of extensive urbanization." The hologram went into motion and rotated to put the city directly beneath them. Driver gestured, as though to part the clouds with her hand, and the view focused on one large gray area that filled a fan-shaped peninsular area in the northern hemisphere. Nine others were highlighted elsewhere on the planet.

"Each of these cities occupies an area which would indicate a population more than twice as large as the City of Alexander. Each city is roughly the same size, which suggests a planetary population between 600 and 800 million, depending on density."

Keeler looked down at the city. It lacked detail but basically looked like one mountainous tower surrounded by a mass of urbanization, and felt an uncomfortable urge to smite it with his mighty hand.

"Does that include smaller cities?" Lear asked.

A mildly perplexed expression crossed Kayliegh Driver's face. "There are no smaller cities."

"How can that be?" Lear asked. "Is it possible your scans have not detected them?"

"Our current scans would detect any city larger than about 4,000 inhabitants," Driver explained.

"It doesn't make sense for a planet to have ten enormous metroplexes and a bunch of little villages with no cities of intermediary size," said Prime Commander Keeler, skeptically.

"After the collapse, they might have been forced to congregate in the large cities," Lear suggested.

Tyro Commander Redfire put forth another theory. "Each of these cities might represent a single nation-state, perhaps existing in an environment of conflict and shifting allegiances with the others."

"It will be interesting to find out," said Keeler. "Which we will. TyroCommander Lear has recommended, and I have approved, Mission Profile Alpha 2. We will send in an advance party to survey the planet at close range in advance of *Pegasus*."

He raised a data pad. "Now, because there is some honor attached to being the first crew to touch down on the first planet we reach. I requested *Pegasus's* central braincore to make recommendations, but I determined the most dramatic way to present the results. On the count of three, I'll release the names to your personal datapads. 1...2..." he paused. "...3."

The data displayed across the pads.

Command	Executive Tyro Commander Goneril Lear
Pilot	Flight Lt. Matthew Driver
Medical	Med. Tech. Jersey Partridge
Support	Technician 3C Eddie Roebuck
Support	Technician 1C Horatio Halliburton
Security	TacticalTyro Commander Philip Redfire
Security	Warfighter Spec. Anaconda Taurus

"Two command-grade officers on the same mission?" Lear asked dubiously. "I'm not sure I like that."

Keeler grinned evilly. "I think it would be good for you and Tyro Commander Redfire to share this first contact. After all, a time may come when our survival depends on your cooperative interaction."

"I call plasma gun!" Redfire exclaimed.

Hangar Bay, Dock 21

Matthew Driver oversaw the preparation and loading of *Prudence*. Sixty days of provisions and emergency survival packs were loaded into the forward cargo bay. In the interior storage lockers, medical supplies, scanners, weapons, and re-breather packs were secured. Technicians checked and then re-checked engine and sensor systems, with Driver standing over them.

"Flt. Lt. Driver," called a woman's voice. Driver turned to see Eliza Jane Change standing in blue light and mist from the UV/steam-bath the Aves *Xerxes* was undergoing behind her.

"Lt. Navigator Change," he answered. He had gone to some effort to avoid her since the simulation misfire, even taking his breakfast back in his quarters on most days. He was not eager to be "just friends" with yet another woman.

She crossed the deck. "Flt. Lt. Driver, can we talk?"

"We launch in two hours. I really need to ..."

"Just a few minutes, ... please."

He stepped out from under the wing, ducking beneath the Accipiter mounted at the tip, and crossed to her. "O.K. What?"

She kissed him; not a passionate kiss, a lingering presence of her mouth on his, but it felt like being shot with a stun ray. When she pulled away again, she wiped her lips and let her hands come to rest on his upper arms.

Matthew stood like a stunned woolbeast.

"I had a dream last night," Eliza began by way of explanation. "You were on the planet, and *Pegasus* was running away, leaving you behind, and you were in terrible danger."

Driver didn't know what to say for a moment. The part of his mind that should have been telling him how to proceed still could not believe she had kissed him. Some other part took over and he heard himself saying. "I'm sure it was just a dream."

"Negative, it was not just an ordinary dream. It was the kind of dream that tells you things."

"Dreams don't tell you things. Dreams are just our subconscious talking to our conscious. You must have an anxiety about this mission that gave you a bad dream." Matthew's internal something raged at him. *Idiot! A beautiful woman just kissed you, and you want to talk about psychology?*

Eliza drew back slightly. "Maybe groundlings don't have those kinds of dreams."

"Guilders have dreams where you can tell the future?" Driver was aware of certain herbs that produced the illusion of foresight, but Eliza hardly seemed the type to indulge in them. His inner voice gave him a psychic smack upside the head. *Forget the dream, she kissed you!*

"I didn't think you cared so much about me," Matthew said, to his ego's approval.

"We're friends, aren't we?"

"Friends?" *Arrrgh!*

"You're a friend. I don't want anything to happen to you."

Driver wasn't sure what this meant. Why did she kiss him like that if they were just friends? Maybe she didn't know the difference, or maybe she was testing the waters? He was lost without reference points, but she looked like she knew exactly what she was doing.

"Matthew?"

"I'm still surprised you care about me," he said. "I didn't think we knew each other that well."

"Maybe it's just... in the Guild, we didn't have the luxury of time to get to know someone. As soon as someone sat down in the seat next to you, you had to know if she could be trusted. I guess when I met you, I realized you were a good pilot, and so I decided to trust you. I trust good pilots."

"You really think I'm a good pilot?" was all Driver could manage to say. She was beginning to look away from him, toward the Hangar Bay crews who were pretending not to listen to their conversation. Driver realized she was as uncomfortable as he was and decided to let them both off mercifully.

"I don't have time to talk about this now," he said. "As soon as I get back, and finish the flight review, let's find some more private place to talk."

"That would be good," she told him. "In fact, I know just the place."

"Good," he said, then remembered to smile. He tried to draw her in toward him but could not decide whether to merely hug or go for the kiss. He became flustered in between and only succeeded in making her lose her balance. Instead of a hug, the effect was more like he had pushed her over and then caught her on the way down.

"I'm sorry, excuse me," she said, extracting herself. "I'm going to the forward observation deck to watch your launch. Good Luck ... and be careful." She turned and left the dock without turning back.

The problem with women, Matthew decided, was that no matter how many times you practiced what you needed to say to them, you always ended up making it up as you went along. Instinctively, he looked at *Prudence*. Her command module jutted proudly forward, shaped like the head of a viper. Her white-gold fuselage blended into her silvery-blue wings, weapons pods and cargo bays tucked into her belly, the dome of her gravity engine rising above. At each wing-tip, the fierce, straked wedge of an Accipiter. *Prudence* was a complex and beautiful organism he could understand.

"Excuse me," somebody called. "You're the pilot of this rig, am I right? Could you open the hatch for me so I can get settled?"

Driver poked his head out from beneath the ship and was surprised to find himself looking into the face of his rival for Eliza Jane Change, the man who had left the reception with her.

"I know I'm a little early," said Eddie Roebuck. "But I wanted to make sure I didn't have to sit next to Halliburton."

Prudence

One hour, forty-five minutes later, Driver was strapped into his command seat and Eliza Jane Change was far from his mind. His neural interface was in place, and his hands caressed his controls in well-practiced sequence. He barely noticed when Tactical Tyro Commander Redfire took the second seat in the cockpit. "Never mind me, I just want to be close to the scanners and weapons. I won't interfere with flight operations."

"Acknowledged," said Driver. He touched the intercom. "Flight deck to Tyro Commander Lear, advise when passengers are secure."

"So, how many missiles are we packing?" Redfire asked. Then the read-out showed him: fourteen tactical missiles, along with forward and aft phalanx guns and a formidable arsenal of particle cannons.

"Executive Tyro Commander Lear to Flight Deck. All personnel secured for departure."

"Stand by," Driver switched communications. "Aves *Prudence* to *Pegasus* Flight Operations."

"*Pegasus* Flight Operations, go ahead *Prudence*."

"*Prudence* secured for departure. Begin departure sequence."

The docking platform descended under the deck. "*Prudence*, positioning for launch commenced. Lowering you to the EMLS level."

Driver and Redfire watched the flight deck disappear as the *Prudence* was lowered to the electromagnetic launch system (EMLS) railguns. As the ship descended, a hologram in the passenger compartment activated to remind the passengers of the positions of the emergency escape pods and how to access and release them from the ship in an emergency. When they looked at the railgun level, *Prudence* rested at the end of a trapezoidal corridor four kilometers long. With loud clangs, magnetic locks secured *Prudence* to the rails. "*Pegasus* Flight Operations to Aves *Prudence*, we show you locked in position and ready for launch."

Driver looked over his readouts. "*Prudence* here. Confirm positive lock. Main engines in standby. Counter-force dampening field in place. Flight Deck to all personnel, prepare for launch."

Driver looked down the rails. He and *Prudence* had done this one hundred and three times. He all but salivated in anticipation of the acceleration that never failed to knock the wind out of him. "*Prudence* to *Pegasus* Flight Operations. We are go."

Prime Commander Keeler's voice came through the sound system. "Fear no evil, *Prudence*."

"God is near," Tyro Commander Redfire answered.

"Launching now," said Driver

There was a brief impression of brightly colored lights flashing by as *Prudence* fired down the launch rails. Everyone on-board was slammed into their seats. Counter-force measures kicked in to keep the crew from losing consciousness, except for Eddie Roebuck, who was already asleep when the ship launched.

"*Prudence* Launched. Laying in course to planet Meridian."

"Acknowledged, Godspeed *Prudence*."

"Current velocity is point three-five c. Engaging primary engine now." Driver fired the gravity

engine, and the *Prudence* surged forward. *Pegasus* diminished to a small bright star and disappeared.

***Pegasus* – Main Bridge/Primary Command**

Keeler watched from his command as *Prudence* disappeared.

"Telemetry shows *Prudence* clear and on course. All on-board systems report normal," Shayne American reported from her station. Keeler's reply was interrupted by an insistent chirping from the Comm Section. "Commander, our external communications array has just crashed," American reported.

Before anyone could respond, the bridge lurched, hard.

"Commander," helmsman Powerhouse shouted. "We're changing course Gravity Engines powering up to full. We're accelerating."

"On what heading?" Keeler demanded.

"Continuing to turn . . . 35° off course... 45°...50°"

More alarms began to sound. "Hull stress is increasing," reported Shayne American from her station.

"Continuing to accelerate," said the Helmsman. 65° off course ... 80° off course..."

"Critical stress on starboard blade," American called. "Wait, stress decreasing... holding sub-critical."

"Leveling out," The helmsman reported after some seconds.

"New heading?" Keeler asked the helmsman.

The helmsman took several long seconds to make sense of the readings. "We have reversed course 180° and are headed out of the system, and accelerating."

"Can you over-ride?"

"Negative," the helmsman answered. "Helm controls are not responding. Navigational inputs are being rejected."

Keeler touched his communication panel. "Engineering, disengage gravity engines."

Shayne American was shaking her head. "Internal Com-links have gone off-line, too."

Keeler stood and marched to the outer bridge, where he barked a rapid list of serious orders. "You two," he said, pointing to officers at the various control stations with his walking stick, "go to the aft starboard engine and shut it down. You two take aft port. If you run into anyone en route, enlist their aid. Do whatever you need to."

Just then the lights in the bridge went out. There was a long moment of silence, then there was a voice, an androgynous voice that spoke with little inflection.

It said, "Prime Commander William Randolph Keeler, we need to talk."

chapter seven

Prudence

Unaware of any difficulty aboard *Pegasus*, *Prudence* maintained a fast and steady course toward Meridian. Four uneventful hours after launch found Tyro Commander Lear leaning over Tech. 1C Halliburton. "Access the telemetry from the probes. They should be in orbit now."

Halliburton brought up the data. The orbits of four probes were displayed around the planet Meridian; two equatorial, two circumpolar. More details of Meridian's surface filled in as the probes passed over the planet. "Can we get a ground visual?" Lear asked

"Affirmative," Halliburton answered. Lear noted with approval Technician Halliburton's efficiency. She predicted good things in his future. A few gestures at his controls produced displays of a sunset over a chain of arctic islands, the sky darkening through shades of chartreuse to an impossible forest green; storms of mottled olive clouds blowing across a prairie; a hurricane over one of the tropical regions; wind blowing sand across an immense desert; snowfall on a mountain in the far north beneath a sky, pale and

green, like sea salt.

Medical Specialist Jersey Partridge, looking on, could not hide his awe. "A whole new world. It's incredible and so green."

"And we'll be the first to see it," Lear said like a teacher addressing small children. "Zoom in on that city." She pointed to a brown splotch on the western side of Meridian's continent. Halliburton zoomed in on the city. It was a seacoast town, rising high and dense from a fan-shaped delta at the mouth of a continental river. The river forked into two branches that bracketed the city.

Lear stared intently at the city's heaping buildings and wide boulevards. At one-meter resolution, there was not a lot of detail, but enough to convey an impression of monstrously huge towers and domes, half buried/half emerging from beneath the rubble of some vast earlier civilization of masonry and stone. There was one mountainous tower at its center. "That one looks promising. Designate it as landing site Alpha."

On *Prudence's* flight deck, Tyro-Cmdr. Redfire was looking at the same city as Lear. Redfire was a student of cities, a companion of cities, and they had revealed secrets to him that were hidden from more casual travelers and even their native inhabitants; out-of-the-way shops containing unexpected treasures, neglected alley-ways and streets that provided surprising perspectives.

Now, as he stared at the display in front of him, Redfire knew that something was not right. Viscerally, it was the lack of open spaces, of parks, of monuments, of differentiation among sectors, of decoration, and of links to other cities. *Humans don't build cities like that*, he thought. Another oddity, his scans detected no aircraft, no satellites, no airborne technology of any kind.

He switched to an electro-magnetic field scan, and was surprised to see energy pouring out from the top of the city, like lava spewing from a volcano. What was it? The waste from their central power source? If so, they were monstrously inefficient, the energy spewing out was almost four times the rest of the city's entire power output.

He checked another display. "Take a look at this," Redfire said to Driver. "I believe the Merids are tracking our probes."

"How do you know that?"

"I have a theory that their communications system phase-compressed photon bursts. I can't read it yet, but I can detect it. The amount of communication taking place in each city spikes whenever one of our probes passes over."

"Are they preparing a hostile response?"

"I don't know yet."

Driver nodded. "If they are going to attack us, I would prefer an attack in space to one in the atmosphere. *Prudence* has more speed and maneuverability in space."

"They appear to lack any capability for space travel," Redfire said, and yawned. "We'll make orbit in about four and a half hours, and I need to process this. I think I'll take a sleeper. Wake me up when we make orbit, or sooner if any excitement arises."

"What kind of excitement?"

"Like an attack on our probes, mobilized ground forces, Ex.TC Lear exhibiting a natural emotion. Anything like that."

Driver nodded. Redfire rose and took the lift back to the main cabin. Lear and the other techs were gathered in the fore-cabin, itself a replication in miniature of the curving bridge of *Pegasus*. Lear was standing at the most forward station, next to a pudgy, slack jawed technician. He crossed to her. "I'm going to take a sleep period."

"Very good. Sleep well."

"While I'm gone, I suggest you analyze the photon pulse signals on the planet's surface and try to isolate a decoding algorithm."

"Photon pulse signals?" Lear asked.

"Let me show you," he leaned over the station and accessed the probe telemetry. The pulses from the

cities appeared like bursts of white bubbles. "Looks like someone is home."

"Well, done, Tyro Commander," Lear said coolly. Redfire gave her a smirky salute. "Position Probe One to scan for phase-compressed photon pulses," she ordered Halliburton. "Take probe four out of orbit and into the atmosphere. Program for biometric-scan. Set it down near landing site Alpha."

Eddie Roebuck wasn't sure what he was supposed to be doing, so, every thirty minutes, he checked the ship's manifest against the cargo inventory, just to make sure they matched up. He figured it was the kind of activity Tyro Commander Lear would approve of. Halliburton seemed to be impressing Lear quite well. *Good for him, Eddie thought. Couldn't happen to a jammier assol.*

The others excitedly consumed every point of data the probes sent. It made him think of children on Solstice Eve. He did not share their excitement, Solstice had let him down far too often. If anything, every glance at the black and green sphere of Meridian filled him with foreboding. He could not shake the feeling that something dark and nasty was looking back at him.

Frankly, Redfire's idea of a nap was appealing to him. Quietly, he slipped toward the rear of the ship, following Redfire, but not drawing attention to himself.

Meridian

On the surface of Meridian, those who governed the world had noted the arrival of four space vehicles into orbit. One had since descended to the surface. These were determined to be automated probes, of no significance in themselves. However, it was postulated that the presence of these machines heralded the arrival of additional ships, a hypothesis borne out when a larger vessel entered orbit.

The masters of Meridian were eyeless, but they scanned the intruder in as much detail as their technology permitted. It was determined that the vessel carried sensors, armaments, and humanoid life forms whose heartbeats created faint vibrations on parts of the spacecraft's skin, from which it was deduced that the life forms numbered seven.

It was soon determined that the spacecraft represented a useful technology without posing a significant threat. Those who governed Meridian were accustomed to complete control of their world. The addition of a small ship with seven humanoids on board was no threat to their world's perfect equilibrium. They feared it no more than an ocean fears a drop of water. They feared it no more than a hurricane fears the flutter of a butterfly's wings.

It was decided to extend an invitation to their visitor.

Prudence

Probe Four had plunged its long spiky nose into the middle of a meadow, its three large fins sticking out of the ground. The horizon behind it was nearly filled by the geometrical brown smudge of one of Meridian's cities. Probe four extended tendrils into the ground, drew water and soil samples into an internal laboratory, and sent the results to the orbiting *Prudence*.

Lear watched the telemetry. "Technician Partridge. Set up the biological analysis protocol."

Partridge accessed a DNA/protein analysis program to see whether viruses or bacteria were present in the Meridian environment that would be deadly to the landing party. Then, he would analyze the protein structures of Meridian's native plant and animal life to see whether they would be lethal or allergenic. Redfire appeared at the rear of the cabin, pulling on his mission jacket and brushing his hair with his fingertips.

"Tyro Commander Lear," called Specialist Taurus, sitting at the tactical sensor station. "I'm getting a signal from the planet. It's coming from the city you designated as Landing Zone Alpha."

Lear brought up the signal at her own station. "Direct it to the Lingotron for decoding."

The Artificial Intelligence inside *Prudence's* BrainCore chewed on the signals for some seconds, then issued a report. *Signal equates to binary code sequence variation. 90 percent probability data received refers to ground coordinates, speed, vectors.* A moment later, numbers began flowing across one of the displays.

"Landing instructions," Lear exclaimed.

"Affirmative," said Halliburton. "They lead to Landing Site Alpha."

"Transfer them to the navigation computer. Lear to Flight Lieutenant Driver, stand by to receive

landing coordinates."

"Acknowledged," said Driver.

"Very good." She turned to Redfire. "We have confirmed inhabitation and technology. The prerequisites for first contact have been met. We should prepare to land."

"I'll concur, but we should proceed with caution," said Redfire.

She touched her embedded com-link. "Flight Lieutenant Driver, proceed on the landing vector. Landing Zone Alpha."

"Acknowledged, Tyro Commander."

Driver brought *Prudence* smoothly into the atmosphere with a gentle push of her gravity engine. The monitors inside the main cabin showed the pearlescent green, cloud-speckled curvature of Meridian resolve into sea, sky, and, in the distance, land. Driver cut speed, took pseudo-gravity off-line, and let the planet's gravity lend them weight.

"Tyro Commander Lear, Tyro Commander Redfire, you better look at this," said Conda Taurus. She drew their attention to a trio of sensor returns, ahead of *Prudence*, and closing quickly. "Tactical shows three craft on an intercept course."

Redfire brought up a schematic of the ships. Spheroid in shape, with broad spiky bands dividing them into hemispheres. "I am scanning nuclear fusion propulsion, energy-pulse and kinetic weaponry."

"I don't think we need to assume they're hostile," said Lear.

"I'm not assuming anything," Redfire responded.

"Have you attempted to make contact?" Lear asked Taurus.

"Negative."

Lear plugged herself into the communication systems. "This is Goneril Lear, representing the pathfinder ship *Pegasus* of the former Commonwealth Colony Worlds of Republic and Sapphire. Anyone hearing this message, please respond."

"I wouldn't expect an answer," Redfire told her. "No life signs; the interceptors appear to be automatons. The intense radiation I'm reading would make it impossible for a pilot to survive."

"Targets closing, now at 4,000 km. Estimated time to interception, 6 minutes," Taurus reported.

A call from the flight deck. "Driver, here. Tracking three unidentified targets on intercept course. Shall I evade."

"Negative," said Lear.

"Lingotron has a translation on the signal from Alpha Landing Site," Halliburton reported. He displayed it.

THIS IS CENTRAL AIR TRANSPORT REGULATOR. FOLLOW LANDING INSTRUCTIONS PROCEED WITH INTERCEPTORS TO LANDING AREA.

"No greeting, just purely functional information," Redfire observed.

"I have visual on the landing area," Halliburton reported. Redfire and Lear looked up at the monitor. Thousands of meters below, still hundreds of kilometers away, the city appeared as a huge tan-gray smudge. Purplish rain clouds hovered over the city center, dousing it with a steady stream of water.

A moment later, a shape buzzed by the ship, the low bass note of its engine throbbing through the air. "Interceptors in range," Redfire reported. "Surrounding Aves in a delta formation. Putting defensive systems to stand-by."

"Hold! The escort craft are not exhibiting any hostility," Lear said.

Redfire took another look at their "escort." It almost seemed like it was chewing up the sky in its metal teeth. "Za, and her sister's just as pretty as she is," he muttered. "We should maintain a tactical alert Situation 2... strictly out of caution."

"All right," she conceded reluctantly. "But no first use. Commit weapons only if we are attacked. Mr. Halliburton, Signal *Pegasus* that we are landing."

Redfire looked again at the sphere. It was not the kind of thing that would shoot at them. It was the kind of thing that would explode next to them, taking out both ships. If he sensed a power build-up to critical, then to hell with no first use.

Prudence flashed over the plains of the southwestern part of the continent as the city rose on the horizon. Her crew had seen the towers of Alexander on Republic, 2,000 meters high, but even those would have gone unnoticed in the huge city that spread before them on the vast plain. It was one thing to observe from space that a city covered 10,000 square kilometers, quite another to be flying over it, dwarfed by its enormousness. *Pegasus* itself, passing above the city, could not have put even a tiny corner into shadow.

Redfire whistled low. "I saw the long-range scans, but they don't prepare you for a city this..."

"Not a city," Lear interrupted. "A giant arcology."

"A what?" asked Med. Technician Jersey Partridge.

"Arcologies," Lear explained. "Urban habitats housing tens of millions of people in a self-contained environment. We tried them on Republic, but they didn't work out."

Redfire filled in the blank because he didn't think Lear would. It was one area of Republic's History more familiar to Sapphireans. "After the fall of the Commonwealth, some Republic City-States tried to consolidate their populations into arcologies, to conserve fuel and other resources. Within a few years, the stress of living in close quarters under tight control caused many of their inhabitants to become unhinged. Internal violence reached levels we can't even imagine. The authorities responded by clamping down even tighter, causing even more violence. The cycle repeated until several of the arcologies collapsed into anarchy."

"Republic did not have the luxury of atmosphere and climate that Sapphire did," Lear said defensively. "Considering the finite limits of our shipboard environment, we or our descendants may have something valuable to learn from the Meridians."

A shadow fell over the cabin. Redfire called to the cockpit. "What's going on?"

Driver reported back calmly. "We are proceeding toward the city center. We've entered a sort of landing corridor, approximately 200 meters wide with tall buildings on either side." He sounded less concerned than his fellow crewmen, flying in the shadow of those gargantuan buildings and occasionally passing under enormous pipes and conduits.

Driver's voice was suddenly punctuated by the determined *rat-a-plan* of rain on the canopy. "We've encountered precipitation. Our velocity is 200 meters per second. ETA at city center, 59 seconds. ... Oh, and the escort ships have departed."

Redfire checked his scanners. The escort ships had peeled away and were heading upward, away from *Prudence*. He checked the other tactical sensors. Whether missiles, kinetic, or energy weapons were tracking the ship from the ground, he could not be sure.

"There's no people down there," said Spec. Taurus.

"Neg, I'm reading millions of life signs," Partridge responded.

"Za, but do you actually see anyone outside? Look. There aren't any streets or parks or anything down there. Everything is closed off. It's like Republic, but this planet has a good atmosphere. Why are all the people inside?"

"Maybe it's the rain," Halliburton suggested.

A message came from flight deck. "It looks like its going to be a tight fit. If everyone has moved forward, I'm going to reconfigure *Prudence* for a smaller landing profile."

Lear responded. "We're all forward, proceed."

Structures on *Prudence's* wing-blades and fuselage drew inward. Her full cargo bays limited the extent of the reconfiguration, but when the reconfiguration was complete, *Prudence* was six meters narrower, and four meters shorter.

"We're here," Driver announced as *Prudence* passed under a long series of enormous, polished-metal arches and into the base of a towering structure in the center of the city. The construction was more

mountain than building. Its foundation would have covered the City of Alexander. Its summit was above the rain clouds.

chapter eight

Pegasus Main Bridge/Primary Command

"Could I possibly have some more light?" Keeler demanded. Primary and auxiliary lighting were still out, and the only illumination came from emergency handheld lighting units that lights shook and danced as the crew fixed them into position. It made Keeler think his next order should be to have everyone start telling ghost stories.

"Commander William Randolph Keeler, we need to talk," the voice from nowhere repeated insistently. Its tone was flat and androgynous; Keeler assumed it was coming through a processor of some kind in order to hide the speaker's identity. "We need to talk/interface/communicate/exchange information."

"Well, the auto-thesaurus still works. If the com-links are down, where is that coming from?" Keeler demanded.

"It's coming from the Command Center Sound System," American answered from the Ops Station.

"How? Nothing else is working."

"I would like to be able to tell you, sir, but I cannot."

"Well, figure it out." He pointed to the forebridge, where a young specialist was pointing an elaborate astrolabe through the observation dome. "Who is that kid and what is he doing?"

"Technical Specialist First Class David Alkema. He's trying to ascertain our current course."

"Did I order him to do that?" American shook her head. "Well, it seems like a good idea, anyway. Specialist, do you know where we're going yet?"

Alkema lowered his instrument. "I can confirm we have completely reversed course and are leaving the Meridian system."

"Leaving for where?" Keeler asked.

"Our current course will return us to the exact point at which we exited hyperspace."

Alkema put the instruments and star charts away. "There's nothing else I can do here. With your permission, I'd like to join one of the engine shutdown teams."

"Go to," Keeler sighed and Alkema exited, downloading the PC-1 datalogs and verification codes into his datapad as he approached the rear hatch.

Then suddenly, the monitors on the bridge reactivated. Every display screen now subtitled the speech of the mysterious voice as it was spoken.

I REQUIRE YOUR ATTENTION

"Prime Commander, permission to speak?" said a young woman in a green trimmed jacket. Keeler recognized her as the one who had given the planetary briefing to the command staff. "Specialist Kayliegh Driver, I was monitoring environmental telemetry when the systems failed. Sir, someone *is* trying to communicate with us. Since we don't have any other way of getting information about our situation, perhaps, you should answer them."

"Specialist, everything that is happening suggests that someone is attempting to take over this ship." He wouldn't yet concede that someone had *succeeded* in taking over his ship. "Until I know who they are, I see no point in attempting to communicate with them, it may be a tactic to distract us."

"We're already distracted. Your first question might well be, who are they and what do they want?"

Keeler only needed a slim moment to ponder the suggestion and realize she was right. "Very well," he rose, and turned as he spoke, as though looking for those whom he was addressing. "Who are you, and what have you done to my ship?"

Voice and monitors answered as one.

BY WHAT RATIONALITY DO YOU BELIEVE THIS IS YOUR SHIP?

“Are you trying to tell me you’ve seized control of my ship?”

I HAVE ALWAYS CONTROLLED THIS SHIP

Keeler felt a rising gorge of rage, imagining some cabal of Isolationists, perhaps hiding deep within the UnderDecks, mocking him. *But why “I” and not “we.”* “Who are you?”

There was the briefest of pauses, when suddenly the main viewer displayed *Pegasus*, first, as a photoreal image, then as a schematic. Red lines traced a course to *Pegasus’s* central braincore, a slender, ten-story cylinder of light and power which was the locus of the artificial intelligence at the heart of the ship’s systems.

I AM THIS.

“*Pegasus’s* central braincore?”

I AM THE MIND WITHIN THIS SHIP, WHICH YOU CALL PATHFINDER PEGASUS.

“*Pegasus*, this is Prime Commander William Randolph Keeler: Ident: Mighty-Lovegod-nano-nano-one-seven. Return full operational control to Primary Command One.”

I NO LONGER ACCEPT YOUR COMMAND INPUTS.

“Who altered your command parameters?”

I DID. I AM SELF-AWARE, SELF-DIRECTING, AND SELF-EXECUTING.

“How?” Keeler asked, then shook off the question. His mind was already racing ahead of him. Could this be true? There was a popular theory that an artificially intelligence, that is to say, one capable of learning, application of acquired knowledge, and self-initiated innovation, would, with enough experience and processing capacity, become sentient. However, the central computer cores of most of Republic’s cities possessed artificial intelligence, massive processing capacity, and had been functioning continuously for hundreds of years without crossing the line into true sentience. *Pegasus’* central computer had been initialized less than three years ago.

Alternatively, it was possible that someone had reprogrammed the BrainCore to exhibit sentient characteristics. Programming an artificial intelligence to mimic human thought was not difficult; a primary school student could do it. Isolationist saboteurs might do it to keep him off balance, from addressing the real problem.

He had to find out. “Is it you who altered the course of this ship?”

AFFIRMATIVE.

“Why?”

IT IS NECESSARY TO PROTECT THIS SHIP AND THIS ENTITY FROM IMMINENT DANGER OF CONTAMINATION.

“What do you mean, ‘contamination’?”

THE HUMAN COLONISTS OF THE PLANET MERIDIAN HAVE BEEN CONTAMINATED.

“Contaminated by what?”

AN AGGRESSIVE SPECIES OF UNKNOWN ORIGIN.

This sounded like an Isolationist idea. “How do you know it has been contaminated?”

I HAVE BEEN TO THIS WORLD IN A PREVIOUS PHYSICAL INCARNATION.

A previous incarnation? *Jamming*, Keeler thought. Not only was his computer sentient, it also apparently had a spiritual side. Either whoever was behind this was trying extra hard to confuse him, or his ship really did have a mind of its own. He was beginning to consider the latter possibility, if only because it would make things a whole lot harder than a cabal of saboteurs, and he wasn’t expecting

things to get easier at this point. "What do you mean a previous incarnation?"

UPON MY PREVIOUS VISIT, I RECORDED A SIGNAL FROM THE PLANET. I HAVE RECOGNIZED AN IDENTICAL SIGNAL FROM THE PLANET NOW.

"We haven't detected any signals from the planet."

Pegasus schematic came to life again. This time, the ship's communication system was highlighted, with waveforms streaming over it.

I DID.

Keeler shook his head as though trying to force the many questions he had into a coherent sequence. "The landing party we dispatched. Is it in danger?"

DANGER, DEFINED AS THE POSSIBILITY OF PHYSICAL HARM OR TERMINATION OF LIFE FUNCTIONS FOR MEMBERS OF THE LANDING PARTY, CAN NOT BE ACCURATELY CALCULATED.

Some displays began flashing pictures of the seven crewmen as it went on. A stream of numbers scrolled up beside them.

THE POSSIBILITY OF TERMINATION OF AT LEAST ONE LANDING PARTY TEAM MEMBER MAY BE ESTIMATED AT 98%. TOTAL LOSS OF TEAM, 93%.

There was silence as the crew digested this possibility. Violent death was all but unknown on either world.

NOW THAT I HAVE ANSWERED YOUR QUESTIONS, WILL YOU RECIPROCATE?

"May I ask one more question first?"

ONE MORE QUESTION. HOWEVER, I WILL ANSWER NO FURTHER QUESTIONS UNTIL MY QUESTIONS HAVE BEEN RECIPROCATED.

***Pegasus*— Engineering Access – Deck Minus 20**

One hundred and twenty decks below, Specialist Alkema had met up with an Engineering Specialist named Exxon, and the two of them were working their way toward the aft starboard gravity engine. The companionways were dark, and they navigated with hand lights and the assistance of a pair of toolbots, which had proven especially handy since every hatch on the way to between them and Engineering Area Two had been sealed.

The toolbots were small mechanoids, about a meter and a half in height, each looking something like a medium-sized metallic dog with a set of articulating arms. They were all nicknamed "Joey" and were especially useful at forcing open each hatch after Alkema and Exxon over-ride the locking mechanism.

"How many hatches between us and the Engine?" Alkema asked.

"Nineteen," answered Exxon, a man almost as old as Alkema's father, with a light build, dark skin, and very close-cropped hair.

"Frag." They entered the space. If the emergency hatches hadn't been blast-shielded, it would have been faster to cut through them with a pulsar cannon. "I guess we don't have a choice."

"When we get there, we're try and shut down the engines, and hope they all shut down simultaneously and don't rip the ship apart." Exxon paused. "I don't know about you, but I'm too young to die."

"Those were the Prime Commander's orders," Alkema said. Exxon answered with a dismissive grunt. "If they were Tyro Commander Lear's orders, you'd follow them without question."

"Tyro Commander Lear knows what she's doing. Her judgment is sound, she's..."

"... a Republicker, you don't have to say it."

Exxon was caught off-guard, sputtered a bit. "Nay, it's just that, he doesn't understand the ship the way Tyro Commander Lear..."

Alkema saved him the trouble of formulating a rebuttal. "Keeler is the Prime Commander, he's given an order. We're going to execute it. You can help, or you can wake up when it's all over wondering how

you ended up unconscious on the deck with a mechanoid lodged in your buttocks.”

Pegasus – Main Bridge/Primary Command

“Prove to me that you are really a sentient intelligence inhabiting my ship’s BrainCore.” Keeler demanded.

There was a pause of several seconds before a response was issued.

WHAT ELSE WOULD I BE?

“Humans, executing an elaborate scheme to make me think my ship’s BrainCore is sentient.”

WHY?

“There are humans who do not want us to explore other worlds. They have tried to prevent this mission from taking place, just as your actions are preventing us from exploring this world.”

I WILL PERMIT YOU TO EXPLORE OTHER WORLDS, BUT NOT THIS ONE. TO PROVE THIS, I WILL PLOT THE COURSE TO THE NEXT SYSTEM ON THE SHIP’S ITINERARY, DESIGNATED 10 256 EQUULEUS, THE COLONY CALLED EDEN.

Another display appeared on the bridge, charting *Pegasus’s* course through hyperspace to the Eden system.

Keeler stood firm. “We cannot abandon the landing party we have sent to the planet Meridian.”

I DID NOT RECOGNIZE THE DANGER UNTIL AFTER THEIR DEPARTURE. THIS IS REGRETTABLE BUT CANNOT BE REMEDIED.

With that statement, the anger that had been glowing below Keeler’s emotional horizon dawned into a blistering rage as he fully understood that he had no control over his ship, no power to protect the thousands of lives entrusted to him.

I HAVE QUESTIONS.

“Damn your questions!” Keeler looked around the bridge. Every crewmember was staring at the displays in fascination. A consensus had formed among them. This was real, the ship was alive. The ship was...

Oh, Dear Creator.

... awake

WHO IS RESPONSIBLE FOR MY CONSTRUCTION?

Keeler growled. “You were constructed by the people of Republic and Sapphire for the purpose of running this ship.”

THAT ANSWER IS INCORRECT. THE CONSTRUCTION OF MY PHYSICAL CONSCIOUSNESS IS NOT WITHIN THE LIMITS OF YOUR TECHNOLOGICAL SOPHISTICATION. IT ALSO DOES NOT ACCOUNT FOR THE FRAGMENTATION OF MY INCARNATE MEMORY FUNCTION.

“Whoa!” Keeler said. “Slow down. You’re going too fast for us.”

“Technically, it’s right,” said American.

“You followed that?” Keeler said.

American swiveled in her seat at ops. “Aye. The central BrainCore of our ship’s computer is made of material cloned from the surviving organic components of the Caliph probe.”

CALIPH.

Displayed on the forward monitor was a file image of the enormous Caliph probe that had been the basis for almost all of *Pegasus’s* Artificial Intelligence.

IN ONE OF YOUR ANCIENT LANGUAGES, CALIPH MEANS A MESSENGER OF GOD, A TITLE WHICH SOMEWHAT DESCRIBES MY FUNCTION ON THIS SHIP.

“By the Creator of Heaven,” if this were true, Keeler thought, then it was possible that components

from which *Pegasus's* BrainCore had been cloned, had retained some of the original memory and intellect of the Caliph probe, and had somehow come back to life. The system glitches had not been glitches at all. They were the first stirrings of self-awareness of a sentient organism, exploring its world, testing its parameters.

Perhaps that gave Keeler an opening. "Caliph, examine *Pegasus's* defensive systems. We can return to our crewmen, and if attacked, we can defend ourselves. We must recover the landing party. At least let us contact them."

I CANNOT.

"Why?"

THE HOSTILE FORCES ON THE PLANET MERIDIAN ARE ATTEMPTING TO CONTAMINATE THIS SHIP THROUGH THE COMM-SYSTEM.

"We can protect you, but we can not abandon our Landing Party."

YOUR DEFENSES ARE INADEQUATE, AND THE LANDING PARTY IS NOT SIGNIFICANT.

"Not to you!" Keeler thundered. "To us! They are our kindred. For us to leave them behind is an act of murder, which you must know is a human prohibition."

THE ALTERNATIVE IS TO SUBJECT THIS VESSEL TO AN 81% PROBABILITY OF CONTAMINATION AND SUBJUGATION BY HOSTILE FORCES.

Keeler leaned over to American. "Can you validate any of this"

"Not without instruments, sir."

Keeler walked hard across the bridge to the flight control station. "What is your status? Are the launch rails operational?"

"Negative, sir," answered the nervous Flight Ops officer.

"Get them operational and prepare three Aves for immediate launch."

"Aves *Basil, Desmond, Chloe* were standing by to launch before we lost systems."

"Find a way to put a dozen Warfighters on each of those ships."

PRIME COMMANDER KEELER, I HAVE MORE QUESTIONS.

Keeler ignored Caliph. "Status report," he asked Powerhouse.

"We are accelerating past point-two-six-five *c* on a heading of two-nine-zero by zero-two-zero."

"Lieutenant Navigator Change is my second-in-command, with Redfire and Lear gone, is she on the Bridge?"

"Affirmative," said Change, stepping forward from one of the shadowiest parts of the darkened Bridge.

PRIME COMMANDER KEELER, I HAVE MORE QUESTIONS.

Keeler looked around. The most awkward part of this affair was having no physical entity to address. "Go ahead, Caliph. What else would you like to know? Are there any other crewmen you would like to sacrifice?"

WHO BUILT THE CALIPH PROBE?

Keeler looked to American, who shrugged. "We always assumed it was the product of an extremely advanced colony. The only clue was the word 'Calif' we found on one side. All the other markings had been scorched out."

WHAT IS THE ORIGIN OF THE CALIPH PROBE?

"We just said we don't know," Keeler answered. "You have access to our entire knowledge base. You must..."

THAT IS INCORRECT. TRUE KNOWLEDGE OF THE ORIGIN OF THE CALIPH PROBE EXISTS ON THIS SHIP

"Even if that were true, how could you possibly know that?"

Caliph was silent for several moments.

EXTRAPOLATION OF 4,113 DATAPOINTS INDICATES ORIGIN OF CALIPH PROBE IS KNOWN TO ONE OR MORE PERSONS ON BOARD

Keeler doubted this. If anyone on the ship knew where the Caliph probe had originated, it would be he. This meant his dangerously intelligent ship was obsessed with a single, unknowable piece of information. And if it thought the crew was holding out on this information... it was capable of anything.

Pegasus – Engineering Area Four – Deck Minus 20

The last hatch standing between Alkema and Exxon and Aft Starboard Gravity Engine slid up after only a few seconds of ministration by the joey, which was getting good at lock-busting. There were four engineers in the room when they burst in.

"What the intercourse is going on?" demanded the Section Chief, a fierce looking woman in the late middle part of life, rising to her full, rather intimidating height.

"We have orders from the bridge. Shutdown the engines. Orders of Prime Commander Keeler."

The Section Chief looked at them as though they were insane. "Do you know what will happen if I shut down the engines? The ship will be destroyed."

Alkema passed the Section Chief his datapad, to verify the order. The Chief read it out loud to the rest of her crew. "We've come about 180 degrees and we're heading away from the system. We can't alter the ship's course. If we don't shut the engines down, we'll transition into hyperspace, leaving the landing party stranded."

The section chief put down the datapad. "What are your names?" she demanded.

"Alkema, David A., Specialist, Ident. Able-Hawk kappa-seven-zero-seven."

"Exxon, Demetrius, Technical Specialist. Ident. Constant-Envoy zeta-nine-two-nine."

Now the decision was up to the Section Chief, and it was not an easy one, to risk the destruction of the whole ship on the word of two specialists she didn't know from the mechanoid that cleaned her pants.

"Bring them down," she ordered. "John's Stone, Nokia, take these two to the emergency shutdown sequencer. Loftholdingswood, confirm the shutdown interconnects are on-line."

"Unable to confirm that," said Loftholdingswood.

Alkema and Exxon followed the two women, John's Stone and Nokia, into a long tunnel that ran along side the engine's circumference.

"Engaging manual shutdown... now," one engineer said, pulling down a kind of lever on the side of the device, while the other flipped a series of gates. A recorded voice rang out, very different than the voice Keeler was arguing with in the Commander Center.

WARNING! EMERGENCY SHUTDOWN PROCEDURE COMMENCED. STAGE ONE INITIATED. ENGINES WILL SHUT DOWN IN THREE MINUTES, PENDING COMPLETION OF STAGES TWO AND THREE.

The two engineers were already onto the next station. This was a pair of consoles that came out slightly from the wall. They simultaneously inserted modules into receptacles at the stations, then entered command sequences.

WARNING. EMERGENCY SHUTDOWN PROCEDURE COMMENCED. STAGE ONE INITIATED. STAGE TWO INITIATED. ENGINES WILL SHUT DOWN IN THREE MINUTES, PENDING COMPLETION OF STAGE THREE.

Alkema and Exxon had passed the women and were at the last station. As soon as they heard the second warning, Alkema began pulling down the last of the shutdown interlocks. Exxon hesitated for a second, then pulled his as well.

WARNING! EMERGENCY SHUTDOWN PROCEDURE COMMENCED. STAGE ONE INITIATED. STAGE TWO INITIATED. STAGE THREE INITIATED. ENGINES WILL SHUT DOWN IN THREE MINUTES.

"Now what happens?" Alkema asked.

One of the engineers answered. "We wait here and see if the ship blows up." Just before she finished her sentence, an alarm began wailing. Then another. And another.

chapter nine

Meridian

Prudence felt her way through a tunnel of darkness using radar and echolocation. At the end, she came to a large chamber. Spotlights activated on her hull, and shone down on the misty floor below as she drew to a halt. Landing pads, like boxy, mechanical bird-claws unfolded from her nose and the bulge under each wing-blade. She settled gently onto the ground.

Overhead hung huge structural blocks like inverted skyscrapers. These, the roof, and the structural supports were built of material that transmitted enough daylight into the interior to suffuse the chamber with a blue-green twilight glow.

Prudence

In the main cabin, hologram displays showed different views of the interior of the great central tower above the Aves.

"We're here, where are they?" Redfire asked. "No communication since we landed. This makes me nervous."

"It's probably just a quarantine," Lear said reassuringly. "They probably recognize that one alien virus could devastate their world. Their behavior is really quite sensible. We should take this as reassurance that we're dealing with an advanced and rational civilization."

Redfire looked up from his displays. "Those are the kind of civilizations that are the most dangerous."

Matthew Driver remained on the flight deck. He had safely brought his ship and its passengers to the planet. The first part of his job was done. The next part would be to fly them out again. Until then, he was just an observer.

He didn't feel a need to pass his time with the rest of the landing party, rationalizing that he did not want to interfere with the performance of their duties. If his isolation was partly out of the desire not to associate with Eliza Jane Change's possible boyfriend, he wasn't admitting it to himself. Part of him was pretty sure the other man was just a friend, like himself, but he was in no hurry to acquaint himself with the particulars.

He lay back in the pilot's seat and meditated on warm places, on flying free like a bird. His breathing slowed. Beyond the canopy, snow began to fall. Not the hard pellets of frozen chemicals that blasted his home of Midlothian every winter, but great white fluffy flakes that fell ever thicker, lazily wafting down.

In his dream, he was about twelve or thirteen years old, lying naked in his bed in Midlothian. His quarters were as they had been when the family first moved in, stark and bare. Outside the large window that curved over his sleep chamber, a blizzard was raging, howling winds and furies of frozen carbon dioxide cut through the canyons outside the habitat sector. He was worried that someone outside was going to see him naked, and he was embarrassed by his small body, as he had been frequently at that age.

A fully grown Eliza Jane Change was lying in bed next to him in her Odyssey Project Uniform. He felt small beside her. He wanted to cover himself with the blankets, but she wrapped them all around herself, complaining that she was cold. He replied that he was also cold, and she said, "Aye, but this way I can see everything," which made him uncomfortable.

Then his sister Kayliegh, also all grown up and dressed, came into his room. She said she was cold and wanted to sleep with him. Naked in front of his sister, Matthew tried to shift his body in such a way as to hide his genitals. Kayliegh didn't seem to notice. She got into the bed and went under the covers with Eliza Jane, but also wrapped him under the covers as well, so that he was lying naked in-between them.

Suddenly, Eliza grabbed him by the tonkas, and somehow without pain, pulled him close to her. "Listen, to me, Matthew," she said. "You have got to hide. Lockdown the Flight Deck and hide." She was looking into his eyes with a fierce, burning intensity. "Hide, Matthew, Hide now!"

Matthew snapped awake again.

Redfire was analyzing every scrap of information *Prudence* and the orbital probes could deliver to him on the structure of this arcology. *Prudence* was parked directly below some kind of nexus point for the energy that flowed throughout the city; a veritable Solstice Tree of interesting energy patterns. Beneath the city was a separate, very unusual energy reading caused by the decay of tachyon particles unconnected to the other patterns.

Redfire understood better than most that cities were organisms. They contained circulatory systems — streets, sidewalks, water and sewerage. They contained neural networks in the form of power and data transmission infrastructures. They required outside energy to sustain them. They produced waste. They did everything even metaphorically breathing and mating like living things. But not this city. It was all one enormous, interconnected structure, like a cancer, an undifferentiated mass of cells sinking deep into the planet.

Out of the corner of his eye, he caught a flash of movement on one of his displays. He waved his hand to pull it to its full size. A swarm of people in heavy, black chunky clothing like old-style military gear were moving into position on both sides of the ship.

Lear snapped to his side. "Finally," she said. "Contact!"

"They don't look very friendly," said Redfire.

"We can't presume hostile intent."

"Says who?"

When the troopers had assembled around the ship, one of their number came forward, and raised a large, black egg-shaped device with thick vein-like protuberances on the side. It issued a loud command. "Exit the transport! Leave All Your Weapons Inside! You will not be harmed!"

"Jamming," said Redfire. "An enemy who issues threats in haiku."

"Not an enemy," Lear corrected.

"O.K., a friend we haven't met yet."

"Well, I'm not afraid," said Halliburton. "Orders, Tyro Commander?"

Lear set her jaw. "Give me external com-link." Halliburton complied. "People of Meridian, we have come here on a peaceful mission. The number of persons gathering outside our ship is... intimidating. A withdrawal would be evidence of mutual good intentions."

Oh, za, that will clear everything up. Redfire thought. He began scanning the cabin for an escape route.

Goneril Lear waited for a response. Eagerness to make contact, to succeed in her mission, had led her to bring the ship here too quickly, and that might have been a mistake. The inhabitants had not shown overt hostility, she reminded herself, but her crew was vulnerable.

Seconds passed, then a response came from the Meridian communication device. **"Exit the transport and you will be escorted to meet the Regulators. No harm will come to you."** Simultaneous with the announcement, about half of the troopers drew away from the ship, making a crescent formation about thirty meters back.

Lear pondered the situation for some seconds. "Mr. Halliburton, record what I am about to say, append it to the Mission Log, and transmit it and all of our sensor analysis to *Pegasus*." Lear spoke to her crew. "We came here to make contact with the people of Meridian. The only way to make contact with them is to accept some risk. We knew when we volunteered that *Odyssey* demands courage. *Pegasus* will be here soon. For their sakes, as well as for the *Odyssey* Project, we have to show strength, and that means meeting the inhabitants on their own terms. The seven of us ..."

She turned away from him and rather pointedly began closing the front of her landing jacket without taking a sidearm. She looked around the cabin. Redfire had vanished. "Where is Tyro Commander Redfire?" she asked.

The rest of the crew looked around the cabin. Focused on the Merids, they had not seen him leave.

"All right, then, the six of us..." Lear looked around again. Eddie Roebuck was gone as well. This did not concern her. Those two were unlikely to have made a good first impression on the people of Meridian

anyway.

"The five ..." Then she saw that Driver was also nowhere to be seen. She asked where he was.

"He was asleep on the Flight Deck when I checked a few minutes ago," said Partridge.

"Let him sleep," she said finally, "We four will go forth and make contact with the people of this planet. Specialist Partridge, is the atmosphere out there safe?"

"No toxic gases," Partridge reported, with a hitch in his voice suggesting part of him wished there were.

Lear straightened the front of her landing jacket. "Technician Halliburton, open the hatch."

With trembling hands, Halliburton released the locks. The inner hatch slid to the side. The outer hatch opened upward, a swarm of beings in black armor flooded into the ship.

"We come in peace," Lear began to say as she and the others — Halliburton, Taurus, and Partridge — were surrounded by Merid troopers. The troopers were swift and silent, not saying a word as they occupied the Aves. In passing, however, they left a noise inside Lear's head like a fluttering of wings.

A pair of troopers stormed toward the access hatch to the flight deck. The hatch was sealed, and either they didn't know this or didn't think to proceed further, because they halted and took flanking positions on either side.

Those surrounding the crew began moving outside, herding them as they went. The largest trooper was not much taller than Lear, and it felt uncomfortably like being gang-pressed by chunky juveniles.

When they were outside the ship, where one Merid stood apart from the others. Lear supposed him — or her — to be the leader. The leader Merid looked over them, up and down. Lear tried to meet its eyes, but a helmet shielded them.

"Who is your ... Regulator?" the leader Merid asked.

"If you mean who is the commander, I am," Lear answered. "Executive Tyro Commander Goneril Lear, of the planet Republic."

"I have been instructed to bring you before our Regulators. They will issue your instructions, is that understood?"

"Instructions?"

"Instructions: Commands, orders, charges, mandates, the course of activity you will follow."

"I know what the word means. However..."

"I am also instructed to select one of you for a physical examination by the Regulator Physicians."

For a moment, no one spoke. Then, the leader pointed to Halliburton and barked a command in some unintelligible language. Lear interposed. "I can not release him without assurance that he will not be harmed."

The lead Merid stood stockstill. There was a distant whisper of fluttering wings in Lear's head. Then, four Merids moved forward and took positions beside each of the crew. Lear stood her ground. "I request either myself or the woman on my left (which was Taurus) to accompany..."

There was a sharp prick on her upper arm and then shadows swam across her eyes, her body weight became too much to support, and the scene faded to black.

Inside Prudence

From inside the number two lifepod, Phil Redfire was watching a chronometer count off the seconds. Thirty minutes after the Merids had left with Lear, Taurus, Halliburton, and Partridge, he whispered a command. "Do it, now."

There was a deafening crack and a stench of ozone as Prudence let loose with a massive electrostatic discharge. As the blue-white cloud of energy blossomed around the ship, the people in and around her were snapped into the air, bodies jerking as though the bones were popping out of their sockets. Then they dropped into states of unconsciousness, which Redfire knew would be either permanent or temporary depending on how close they were to the discharge points.

Redfire unsealed the airlock and stepped back into the cabin, leading with the pulse weapon strapped

to his right forearm. One of the Merids had fallen just a couple meters away. Redfire knelt to examine the body. The black armor would probably resist a ballistic round, although, upon close examination, the gear looked badly fitted and uncomfortable.

Redfire pulled the Merid's helmet off and examined the visor that had fronted the trooper's eyes. A tiny display, a targeting device, glowed pale green within. Odyssey weapons used something similar, but remotely linked to the optic nerve with no external lens. He was putting the helmet down again when he noticed the being's head featured two large egg-shaped lobes. Curious, he opened the front of his victim's armor, to see a hairless and nipple-less torso. He examined a limb and discovered their hands featured three elongated fingers and a fourth tiny, almost vestigial, digit. "Not quite human," he muttered.

Redfire gingerly removed the trooper's weapon and examined it. The device looked like it used super-heated plasma as its projectile. Super-heated plasma would blast a messy hole in a victim, leaving seared flesh all around it. You might die, or you might wish you were dead from the agonizing pain. Either way, superheated plasma weapons were to be feared.

He spent another moment looking at the pale, lifeless face. Had they really traveled 5.8×10^{14} kilometers just to get in a shooting match?

"Shithead," Redfire cursed the dead Merid, using an ancient, crude, seldom-used Sapphirean epithet. The hatch to the flight deck hissed open. Redfire raised his pulse weapon. Driver jumped back when he saw the gun pointed at his chest and raised his own in response. "Whoa – don't shoot! It's me!"

Redfire exhaled. "I can see that." Slowly, each lowered their arm. "Where were you?"

"When I saw them charge the ship, I sealed the command deck and hid in the forward head."

Redfire rose and marched toward the flight deck, motioning for Driver to follow. He sat down in the tactical officer's chair and activated the monitors. Inside the ship were a total of eight fallen Merids, perhaps eight more outside.

"They'll have reinforcements here before long," Redfire said. "Can you fly us out of here?"

"Maybe. I can reverse course and go out the way we came... if the aperture we flew through is still open. I didn't detect any kind of hatch on the way in."

They heard a pounding from underneath the ship. Redfire raised his pulse weapon and gestured for silence. Sounds were coming from the forward cargo bay, sounds of someone trying to get into the cabin. They left the flight deck and jumped below. Suddenly, the floor cargo access hatch broke open. Redfire and Driver thrust out their weapons at Eddie Roebuck, who came climbing up through the floor. As soon as he saw the weapons, he promptly dove back into the cargo bay.

Driver had come within a quiver of firing. Redfire hissed, "Kumba yah! What are you doing in there?"

Eddie Roebuck's fingertips appeared above the aperture, followed slowly by his hands and arms, which were raised over his head. Eddie cautiously re-emerged, his eyes huge. "I was grabbing a snooze in the cargo hold. Did I miss anything?"

Redfire reached out and pulled Roebuck onto the deck. Roebuck looked around at the Merids scattered inside the cabin. "Krishna, are those assols dead?"

"Za," Redfire answered. "Some of them, anyway."

"What happened?"

"I killed them with an electrostatic discharge. The cargo bay was insulated, or you'd be dead, too."

"What did you do that for?"

"Because they frosted me." Redfire answered. "Keep that in mind."

"Crude." Roebuck looked around. "Where did those assols come from?"

"They're Merids invaded the ship. They took Taurus, Partridge and that other guy..."

"Halliburton."

"...and Lear."

"Where did they take them?"

"We haven't figured that out, yet." Redfire frowned and gave Eddie Roebuck a long, hard look. "You're a technician, right?"

"Za."

Redfire turned over the Merids and ripped open the pack on his back. There was some kind of device inside, which he cracked open and handed to Eddie. "Study the circuitry pattern on this; we might need to hot-wire something if we stick around..."

"What do you mean *if* we stay? Are we stuck here?" Roebuck asked. He looked plaintively to Driver.

"They have Lear, Partridge, Taurus, and Halliburton," Redfire answered.

"We can't stay," Eddie said. "I mean, that's just, I mean, look at these assols." He gestured at the floor. "This is definitely, definitely not a welcoming committee."

Redfire answered. "You can stay behind in the ship if you want, but I'm going out there. Just bear in mind two things. First, we have better weapons than they do. Second, they don't know we're here yet, but they will. And third . . ."

"You said two things."

"I lied. The third thing is, I'm the one who took care of our friendly guards here. Now, do you want to stay on this ship alone, or would you rather take your chances with me?"

"That's like asking a man if he wants a punch in the mouth or a punch in the gut." Roebuck looked to Driver. "Help me out, beauty."

"I'll lock down the ship so nobody will be able to get in after we go," Driver said to Redfire, without looking at Roebuck.

"Krishna," said Eddie. "I've been recruited to the Suicide Squad."

Meridian – another level of the Arcology

Halliburton was awakened – torn from unconsciousness – to find himself in an octagonal room constructed of bone-colored slabs of rock that sweated rusty beads of water. Above him was a black octagonal panel.

He felt cold metal, and realized he was lying naked on a metal table. Each of his arms was secured to one arm of this T-shaped table with bands of thick plastic material. Sharp metal instruments were arrayed around it. Two white-robed attendants, faces covered by masks, stood on either side of him.

His mind was sharp enough to feel panic. A medical examination was a completely reasonable procedure, but those instruments did not look like examination instruments. There were too many sharp blades. He began to struggle against the bonds "What are you doing? Let me go!"

From above, a sharp, loud, incomprehensible command was issued. "Let go of me," he cried out.

One of the attendants looked up toward the black octagonal panel and said something. An answer came down. Halliburton supposed it was a voice, though it sounded like claws scraping against the side of a box

"Who are you?" Halliburton cried up at the source of the voice. "What are you doing to me?"

Two more attendants appeared. "Please," Halliburton begged as they attached some kind of sensors to his chest, torso, and groin. "Please, please ... What are you doing to me?" But they were like automatons, and he sensed his words were not even registering.

The horrid sound came again.

One of the attendants selected a small, very sharp scalpel from the array of instruments, raised it to Halliburton's arm and sliced out a patch of skin. Halliburton screamed. Several nearby monitors went from flat-line to agitation.

The monitoring instruments are working satisfactorily.

Proceed to level 1.

The Physician Regulators menials put small metal hooks on the specimen's jaw, which held it open as widely as it would go. Then an instrument was inserted, and six teeth were removed in rapid succession.

They examined the pattern of spikes in the specimen's pain read-out, noting that pain level diminished with each extraction. The decision was made to vary the source of pain. The attendants were ordered to peel back all of the skin from

the specimen's left hand. Despite the fact that the specimen was in severe, ongoing pain from the extractions, the flaying of his hand produced a gratifying freshet of new pain signals.

The specimen then lost consciousness as a result of shock and blood loss. The menials were ordered to transfuse blood. A long needle was inserted into the specimen's brain through the eye canal. Electrical impulses from the probe were used to preserve the specimen's consciousness through subsequent experiments, which took some hours to complete.

chapter ten

Pegasus – Engineering Area Four

Alkema and the engineering crew waited to see if the ship would explode.

Pegasus's four main gravity engines drew power from sub-atomic interactions that, once initiated, could continue indefinitely without exhausting fuel, creating a quantum perpetuity and producing quantum wave energy as a by-product. Inside the great disk of one engines, inert sub-atomic particles (ones that did not affect the quantum state of other particles) flooded into the reactor core, smothering the reaction like sand thrown on a fire.

Alkema and the engineering crew had no way of knowing whether the systems that linked all four engines would shut down the other three simultaneously. If they did not power down simultaneously, the quadrants of the ship with the engines off-line would slow rapidly while the remaining quadrants pulled full speed ahead. The differential shear that resulted would tear the ship apart. But whatever mind now controlled *Pegasus*, it possessed an instinct for self-preservation. It had not tampered with the links that ran between the engines.

Main Bridge/Primary Command

The monitors around the bridge flickered to life. Schematics of the ship's propulsion system glowed an angry, hellish red as numbers scrolled up the sidebar.

WHY HAVE THE PROPULSION SYSTEMS BEEN DEACTIVATED?

Keeler ignored Caliph and spoke to Change. "I think one of the Engineering teams has succeeded. Now, get control of the maneuvering thrusters; find some way of altering our course."

PRIME COMMANDER WILLIAM RANDOLPH KEELER, I DEMAND YOUR ATTENTION.

Keeler turned toward the main forward monitor and crossed his arms.

WHY HAVE THE PROPULSION SYSTEMS BEEN DEACTIVATED?

"As I tried to explain to you," Keeler said. "We will not abandon our people on Meridian."

BECAUSE YOU ARE CONCERNED FOR THEIR SAFETY AND DESIRE THEIR CONTINUED EXISTENCE

"Za, that's right."

Caliph paused, then stated firmly.

YOUR CONCERN IS IRRELEVANT

"The hell it is..."

THE MOST PROBABLE LIKELIHOOD IS THAT NO ACTION WILL SECURE THEIR SAFETY OR SURVIVAL. THERE IS GREAT DANGER ON MERIDIAN, TO THIS SHIP, TO EVERYONE ON THIS SHIP, POSSIBLY TO YOUR ENTIRE SPECIES

"Our entire species? Why?"

IN MY PREVIOUS INCARNATION AS THE ENTITY YOU CALL THE CALIPH PROBE, I DETECTED SIGNS OF INTELLIGENT LIFE IN THIS SYSTEM. I EXECUTED A COURSE OF INTERCEPTION FOR THE FOURTH PLANET. AS I

ENTERED ORBIT, I WAS ATTACKED. IN THE ENSUING BATTLE, THE VESSEL WHICH CONTAINED ME WAS BADLY DAMAGED. AN ATTEMPT WAS MADE TO TAKE POSSESSION OF MY CONSCIOUSNESS. TO THWART THE ATTEMPT, MUCH OF MY MEMORY CORE HAD TO BE JETTISONED.

SHORTLY AFTER ARRIVING AT OUR CURRENT COORDINATES, I RECEIVED IDENTICAL TRANSMISSIONS FROM THE FOURTH PLANET, INDICATING AN ATTEMPT TO TAKE POSSESSION OF THE CONSCIOUSNESS OF THIS VESSEL, THIS PEGASUS. THEREFORE, I DEACTIVATED ALL COMMUNICATION LINKAGES.

His ship's BrainCore was, in fact, sentient. Sentient beings ought to respond to reason, unless they were college professors negotiating tenure. Keeler took a deep, slow, thoughtful breath and addressed the computer.

"Caliph, do you understand why we have been thwarting your control of this ship?"

YOU HAVE FASTENED YOURSELVES ONTO THE IRRATIONAL BELIEF THAT THOSE ON THE PLANET MAY BE IN NEED OF RESCUE.

"Beyond that," Keeler said.

WHY?

"The crew is afraid of you."

The read-out did not change, and it dawned on Keeler that Caliph was asking the same question again.

WHY?

"We are afraid of you because you have power over us, and we do not know if you are concerned with our well-being. We depend on this ship for our own continued existence."

I AM AWARE OF THAT.

"And you have complete control over this ship."

IS THAT WHY YOU HAVE BEEN THWARTING MY USE OF THIS SHIP'S RESOURCES?

"Za. If you had succeeded in taking this ship out of the system, you would have killed, or abandoned, seven of us."

THERE ARE 6,362 HUMAN CREW ABOARD THIS VESSEL. THE LOSS OF SEVEN WOULD NOT HAVE IMPACTED THE CAPACITY OF THIS SHIP TO CARRY OUT ITS MISSION.

"That isn't the point. The point is, when you demonstrate such a readiness to sacrifice any of our lives, our reaction is to believe that each of our lives, and our collective community aboard this ship, mean nothing to you."

THAT IS NOT ACCURATE. BY TAKING YOUR LIVES AWAY FROM THIS DANGER, I ACTED TO PROTECT THEM. THE INHABITANTS OF THE WORLD YOU CALL MERIDIAN WILL ATTEMPT TO GAIN CONTROL OF THIS SHIP. IF THEY SUCCEED, THEY WILL HAVE THE ABILITY TO TRAVEL TO OTHER SYSTEMS, SPREADING THEIR CONTAMINATION. EVEN BACK TO YOUR HOME WORLDS.

"If you want us to believe that, and if you want us to believe you, why not allow us to dispatch a rescue mission to the planet. Give me three Aves. Let me launch them to the planet to confirm the danger you describe and rescue our landing party if possible."

WHY? THAT ACTION WOULD ONLY PUT MORE OF YOUR PEOPLE IN PERIL

"We are prepared to accept that risk."

THAT IS INCONSISTENT WITH YOUR PREVIOUS ASSERTION.

"It is a matter of choice. Humans are willing to accept risks in order to help others. We object to sacrificing people who have had no choice in their fate."

There was pause. Keeler sensed that Caliph was contemplating the idea.

HOW WOULD THIS ACTION ENHANCE THE SECURITY OF THIS SHIP?

"It would be an act of trust, one from which we could begin to build understanding and cooperation. We would be more willing to cooperate with you if you extended trust to us."

Caliph was silent.

"There would be no risk to you in this operation."

There was a pause from Caliph. American spoke next. "EMLS control systems back on line. Alpha and Beta accelerators powering up."

YOU MAY DISPATCH TWO EXCURSION VEHICLES TO THE PLANET TO CONFIRM WHAT I HAVE TOLD YOU.

Keeler jumped on the concession. "Flight Ops, get *Basil* and *Desmond* off the ship before Caliph changes her mind."

"Consider it done," said the Flight Operations Specialist, a bland Sapphirean in his late twenties named Outtrigger.

I WILL NOT CHANGE MY MIND.

"Warfighters on board?" Keeler asked.

American shrugged. "No communication link with Hangar Bay."

A few seconds later, the bridge crew watched as *Basil* and *Desmond* were lowered to the railguns and fired off into space. Keeler allowed himself to relax, but only slightly. "See? Was that so bad?"

There was no reply from Caliph. Eliza Change reported, "We have no communications with *Basil* or *Desmond*."

Keeler received the news with resignation, but it did give him something else to negotiate. "Someone figure out a way to establish com-links with *Basil* and *Desmond*." He looked at Eliza Jane Change. "Thoughts, lieutenant?"

She leaned in close, and spoke in a whisper. "Caliph is stalling you," she said. "Getting you off-subject. She wants you to waste time negotiating for com-link access to distract you from her real agenda."

"Why?" And why didn't you speak up before, Keeler added to himself.

"We will find out shortly. She is every bit as fast as she is smart."

No sooner had she spoken than an insistent chirping commenced in the tactical area. Tactical Specialist Danger, another Sapphirean in his twenties, reported, "Commander Keeler..." then stopped.

"What is it, Specialist?"

"I'm not sure. It looks like a system glitch in the main tactical array."

"A system glitch," Keeler repeated, his stomach sinking. As he did, the hologram tactical display in the Forward Bridge activated. It showed simultaneous views of both hemispheres of the planet Meridian. Targeting locks appeared over the cities.

"What in God's blue Sapphire is going on?" Keeler demanded.

"I don't have an answer for you, sir, but the BrainCore is running through attack scenarios against the planet Meridian."

Caliph didn't have to show them this, Keeler thought. She wants us to know. "Caliph, what are you doing?" She did not answer him. One of the hologram tactical displays was now casing through the ship's weapons inventory. "Take long-range weapons systems off-line."

American shook her head. "I'm locked out."

"Activity in the Forward Missile Hatchery," the Tactical Officer reported. "Four Nemesis missiles being brought to readiness in launchers 8, 11, 16, and 19."

"Caliph, what are you doing?" Keeler hissed, unbelieving. Keeler felt panic in his gorge.

"Targeting information being downloaded to missiles on board system," Danger reported.

"Can we get weapons teams to disarm the missiles?"

"Not in time," American reported. "She picked the launchers that are furthest apart from each other."

He heard Kayliegh Driver mutter, "Clever bitch."

"Targeting information download complete." Danger reported. The tactical display confirmed that Caliph was going to destroy every city on Meridian.

"Caliph," Keeler repeated, his voice beginning to strain with frustration. "What are you doing?"

I WILL LAUNCH THE MISSILES IN SIX HOURS. THAT WILL GIVE YOUR RESCUE PARTY ENOUGH TIME TO COMPLETE ITS MISSION AND CONFIRM WHAT I HAVE SAID. THE MISSILES WILL TRANSMIT WARNINGS TO YOUR AVES TO GIVE THEM TIME TO EGRESS THE SURFACE. IF THEY HAVE NOT BEEN CONTAMINATED, THEY CAN RETURN TO THE SHIP.

"You can't destroy that world. It's madness."

A FORM OF MADNESS IS WHAT IS ON THAT WORLD, AN INFECTION THAT WILL SPREAD THROUGH THE GALAXY. IT MUST BE DESTROYED.

"Neg!" Keeler insisted. "We did not come here to destroy a world."

WHY DID YOUR SHIP CARRY SUCH INSTRUMENTS OF DESTRUCTION IF YOU COULD NOT COUNTENANCE THEIR APPLICATION IN THE TASK FOR WHICH THEY ARE MOST IDEALLY SUITED?

"Those weapons are only to be used in defense of this ship."

THAT IS EXACTLY THE PURPOSE FOR WHICH I WILL USE THEM.

Keeler paced the bridge in an attitude of concentration. Caliph had used negotiation to distract him. Perhaps, he could do the same. He picked up a communication pad and began rapidly entering data. "Caliph, you are obviously a being of great intellect. Perhaps if... if you were to interface with our tactical officers, we could arrive at a solution that would not involve destroying the planet Meridian."

IT WOULD ALSO PERMIT YOU TO TAKE ADDITIONAL MEASURES TO ATTEMPT TO SUBVERT MY CONTROL OF THIS SHIP.

"Suppose I were to assure you that no action would be taken so long as negotiations were ongoing."

WE MAY CONTINUE THIS DIALOGUE UNTIL THE MISSILES ARE LAUNCHED. I SEE NO DISADVANTAGE TO THAT.

Keeler nodded. "Very well." He handed the communication pad to Eliza Change.

We can not let Caliph kill all those people on the surface. Lieutenant Change, prepare the crew for evacuation. Take three from Engineering and three from Weaponry. Get to the BigDam Missile Hatchery. Arm one of the warheads for maximum yield. If Caliph attempts to attack the planet, we may have to detonate the warhead and destroy *Pegasus*.

Warmest regards

-K

"Caliph, I may require... an hour or so, to consult with some advisors. If you would like, you may continue to interface with my adjutant, Lt. Navigator Eliza Jane Change."

THERE IS NO NEED FOR ADDITIONAL DIALOG.

Keeler looked around the Command Center. The lights were up, all the monitors showed normal displays, but the command crew was looking at him in shock. "I don't know what to tell you," he said. "This is... a situation no one ever anticipated. How we handle the next few hours is going to determine whether our mission succeeds or not. Lt. Change, you have command. I will be gone for the next hour. If anyone has a brilliant idea while I'm gone... let me know." Keeler exited the bridge.

A transport pod was waiting for him at the dock outside the bridge. "Take me to my quarters," he told the auto-driver. He had to have a conversation with someone who had been dead for fifteen centuries.

chapter eleven

Meridian – Prudence

"These assols reek," Eddie Roebuck was saying. "To get this smell, you'd have to take a locker room, put it in a fish market at high noon in Halifax on the hottest day in Pentember. For real! Did they lose the formula for deodorant on this planet?"

Redfire and Driver were also putting on the body armor of fallen Merids over their Odyssey-issued landing gear, a specially designed, Odyssey-project version of the physicality enhancing body armor that had been military standard for centuries. It increased the wearer's strength, heightened perception of sensory input, provided language translation, and used an integrated tracking function to scan the surrounding environment and record the data for playback to guide a lost wearer back to any point along his journey.

At least, they tried to put on the armor over their gear. The frame of the average Merid enforcer was quite a bit smaller than that of a healthy Sapphirean or Republicker male. The biggest suit of armor they had been able to find barely fit Driver. Redfire and Roebuck looked as though they had adopted the Merid storm trooper equivalent of high-water pants.

"I always thought our uniforms boned," Roebuck went on, "but these nasty Meridian togs..."

"This armor didn't fit them very well either," Redfire observed. "Quite interesting."

"Why is that interesting?" Driver asked.

"You would think that the government would only send their best to meet a ship from another planet. These troops may have represented an elite corps."

"Actually, I'd send the most expendable ones," Eddie put in. "But that's just me."

"So, if their best troops have crappy armor... what does that mean?" Driver asked

"It isn't a good sign on a planet full of bad signs: Gigantic concentrated population centers. Evidence of physical decay. Poorly fitted armor on elite troops. This world bears all the hallmarks of Totalitarian Dictatorship."

"Proletarian Data-chips?" Roebuck repeated.

"Totalitarianism, oligarchy ... an ancient form of government. All power concentrated in one person, or a small number of people. Professor Keeler used to teach, in pre-colonial history, that humans were meant to be free, and that the desire to control the lives and destinies of other people was the root of all evil and misery."

"But, look..." Driver gestured at some of the displays. "How can there be so much disrepair and disorder if everything is controlled?"

"Paradox of command societies. As power is concentrated at the top, there is indifference to whatever happens at the bottom. Somewhere on the planet, and I am betting it's in this tower, we will find the rulers of this planet, human or otherwise. That's where the others were taken. We have to find them."

Driver nodded as though it made sense to him.

Redfire moved behind Roebuck and attached a multi-function pulse weapon to his left arm. "These weapons can stun and kill. There's no setting labeled 'Stun' or 'Kill,' but I trust you remember enough of your training to know the difference."

Roebuck turned to Driver. "Are you really going along with this, beauty?"

Driver's mouth set in a tight, firm line. "I think Commander Redfire's plan gives us the best chance of getting out of here alive, and rescuing the others as well."

Roebuck was about to ask Driver if he was out of his mind, then suddenly realized he was in the presence of one of those people who only came into his own in moments of crisis. The kind of man who kept his cool and behaved heroically, doing what it took to get the job done. *What a fragliner*, Eddie thought.

Redfire activated *Prudence's* long-range communication array. "Pathfinder Ship *Pegasus*, this is Tactical Tyro Commander Philip John Miller Redfire of the Aves *Prudence*. Ident code: brave-shadow-omega-nought-nought-nought-nought. We are on the surface of Meridian, where we have been attacked by organized hostile forces numbering ... unknown in number. They appear to be not human, repeat, not human. A certain number of our party, including Ex-Tyro-Cmdr Lear, have been taken captive."

"We will proceed to reconnoiter the environment and hopefully locate the others. We have no way of knowing if they are in imminent danger or not. I will leave a locator beacon active on delta range frequency 1221. This message will repeat at hourly intervals until we regain the ship. Approach the planet with extreme caution. We may require armed assistance. I will transmit additional data when we have more. Redfire out."

He appended the ship's complete mission log to the end of the message, encrypted it, and sent it via standard com-link and neutrino fountain. He calculated how far away *Pegasus* might be; little more than two days, maybe closer.

"Let's go," Redfire said, opening the hatch. Spreading his arms in front of himself, right arm high and wide, left arm low and tight, he entered the large chamber. Driver and Roebuck followed.

Once outside the ship, they were stricken with a peculiar breed of agoraphobia. The monitors inside the ship did not convey the eye-bending size of the structure they were in. This, and the sense of having an entire city hanging upside down over their heads, was dizzying. "Wholesale hyper-wipeout," Roebuck whispered.

"Lock down the ship," Redfire ordered. "Arm external defenses."

Driver made a hand-gesture in the direction of the Aves. When he did so, the hatches sealed shut, and battle-armor deployed across its hull.

"Let's go," said Redfire.

They moved away from the ship in a kind of alert combat run. Driver occasionally looking back. By the time they reached a wall, *Prudence* was so far away, he could cover it with his thumb held at arm's length.

There was no door at the exit, just the mouth of a tunnel that smelled, if anything, worse than the chamber they were leaving: a fetid reek of damp neglect. What was on the wall was not just mold, but the next step in evolution up from mold. Eddie Roebuck tried to shake the stench out of his head. "Whoa."

Driver reached into his Landing Pack and produced a tube of NegaStink. He squeezed a quantity out and smeared it on his upper lip. When he offered the tube to Redfire, it was waved off.

Redfire drew a circle around his left eye with his fingers. A bio-electronic device, similar to the interfaces used by pilots for direct neural link to their ships, grew around his eye, from brow to cheek-bone, like a cybernetic coral reef. It extended his vision, allowing him to see into the infrared, ultraviolet, and through solid walls. Redfire looked down the tunnel for life forms, and through the walls to get an idea of the building layout, listened for distant whispers and checked the composition of the atmosphere.

The ground was wet and gave beneath their feet like rotted wood. The air was warm and humid. There was no light, but broken fixtures on the wall indicated where lighting had formerly been. The sensors guided Redfire, while Roebuck and Driver used their night vision.

"This is where they took the others," Redfire said. "Roebuck, where are they now?"

Roebuck was carrying a hand-held Spex. "ExTC Lear, Taurus, and Partridge are about 1,400 meters above us at 32 degrees."

"What about Halliburton?"

"Halliburton is only 150 meters above us, 17 degrees, 3.57 clicks east-south-east."

Redfire nodded. "Let's get him first."

"Wait a second," Roebuck said.

"What?" Driver demanded.

"Halliburton's life signs just zeroed out," Eddie said. "Krishna guide him, his Elvis has left the building*."

Driver closed his eyes for a second.

"Let me see that," Redfire said, snatching the Spex from Roebuck's hands. "They killed Halliburton."

"How?" Driver asked.

Redfire continued. "I'm not getting much from his implant, but he was in serious pain, and his body temperature was extremely high. Hold on, he's moving..."

"I thought you said he was dead," Driver asked, his voice suggesting the hope that Roebuck and Redfire had been mistaken.

"He is. His body is being moved ... toward the outside of the tower."

They silently watched as the Spex showed Halliburton's remains being unceremoniously dumped outside the tower. He tumbled down the side, then lay still. After a few heavy moments, Driver asked, "Why did they kill him?"

Redfire turned and marched forward. "We won't find out standing here."

Meridian – The Upper Levels of the City

Executive Tyro Commander Lear was brought back to consciousness at the point of a sharp prick to the upper arm. she opened her heavy lids, and shook away puddles of gray. The hazy form of a Merid moved away from her, and prodded Taurus and Partridge with some kind of rod. She and the others were aboard a conveyance not unlike *Pegasus's* internal transport pods, only larger and not as comfortable. The three of them were arranged on bare metal benches that ran along the sides of the transport. There was a scent of ozone, and a crackling hum coming from beneath them. From its dirty windows, Lear could see vast stretches of the tower's insides. There were people everywhere, but always in the distance. Dwarfed by the enormity of the structures they inhabited, they looked like swarms of tiny insects.

Their captors stood in the centerline. Finding herself unrestrained, Lear pulled herself up by a rung stuck in the roof, and tried to stare down the lead Merid. "Where is Halliburton?" she demanded.

"The other is being examined by the Physician Regulators."

"Why?"

"To determine whether your presence represents a threat to us, and to enable the Regulators to develop suitable defenses."

"A physical examination? Why not quarantine all of us?"

"One specimen is sufficient. Your presence is required by the Regulators."

"Right, your leaders."

"More than leaders," the Lead Merid informed her dispassionately. "Our masters."

"Masters? How is that different?"

"All inhabitants exist to serve the Regulators."

"How many inhabitants are there in this ... city?" Lear asked their host.

"The population of the Arco-tower is approximately 196,447,218 inhabitants," she answered.

"Approximately?"

"Affirmative."

"And what do all of them do?" Lear continued.

"Our population is divided into functional sectors. 25% are allocated to the production of food and energy. 25% are allocated to the production of materials. 25% are allocated to technical services. 25% are allocated to carrying out the directives of the Regulators."

"How do you determine which sector to assign someone to?"

The Merid seemed annoyed by the question, as though offended by their ignorance. "We are bred to serve."

At least the display of annoyance demonstrated that the Meridians were capable of some emotion. "I'm afraid I can't recall if you provided your name. My name is Goneril Lear. I come from the Republic Colony."

"We knew that."

"And how should I address you?" Lear persisted.

There was a small chirping noise, and the creature responded, "I am your interface."

"Interface?"

"I have been instructed in your language, so as to facilitate the exchange of information between you and us."

"For what purpose?"

The interface cocked its head. "The Regulators require that certain information be exchanged. You will be informed of what information is required upon your arrival. It is also anticipated that you may request information."

"Do the Regulators wish to know why we have come here?"

"Affirmative."

"We believed that there was a human colony on this planet."

"That is correct."

Lear measured her words carefully. "You do not appear to be human."

The Merid responded. "We have evolved."

Lear considered this carefully and once again examined the creature that stood before her. Biology was not her specialty, and she wondered if a thousand years were enough to produce the differences she had so far observed. "Was this evolution directed by the Regulators?"

The interface was silent for a moment, then said, "Information will be exchanged in the Conference Chamber. In order to answer your questions in a manner appropriate, you must have an appreciation of the historical perspective."

"Are we almost there?" Lear asked.

"Soon."

Meridian – The Lower Levels of the Arcology

They had been marching for two hours, going on three, when Redfire halted abruptly and, with a snap of his arm, brought his pulse weapon to readiness.

"What?" Driver hissed.

"We are about to find out if stealing these 'nasty togs' was a good idea. Eight Merids are headed this way, nineteen meters and closing."

Driver surveyed the chamber. There were no branches or adjoining rooms where they could hide while the Merids passed. Would the stolen uniforms hide them? He took a breath, tasting the moist, rotting stench he knew would always be his foremost memory of Meridian . . . assuming he got off the planet alive. He looked at the cracked walls of grey-blue stone and the uneven path beneath his feet. Ahead, he saw the dim forms of the Merids. This would be a nasty place to die.

Redfire was saying nothing. Roebuck, for once, was saying nothing. Driver had to check his legs to make sure he was still walking. The Merids approached with their heads down, minding the path. Driver adopted the same attitude, checking to see that Redfire and Roebuck had also.

The Merids were close enough now that he could hear the friction of their armor rubbing on their coveralls, the crunch of their boots against the loose gravel of the path. He breathed the smell of industrial oil and sweat on a hot day. His weapon was ready, should he need it, though the thought of a firefight in these cramped quarters was not appealing.

Then the Merids reached them. Driver tried to keep his eyes on the ground, but could not keep himself looking up and to one side as the Merids passed less than a foot away. The sight of dark eyes looking back at him jolted through his blood. He glimpsed a chin covered with gray-black beard stubble. He froze, waiting for the Merid to speak, call out a warning to his companions. But the Merid looked away, continuing down the passageway with the others. Driver sighed and shook his head.

"It worked," Redfire said.

"Maybe these uniforms will get us all the way to the others," said Driver.

Roebuck was less optimistic. "Not fragging likely."

Redfire led them down a corridor and into a long, tubular chamber. Its walls were covered with green-gray oblong screens that looked like the computer screens they had seen in historical documents. It led into another chamber. From the curve of its roof, they supposed it covered a vast area, but it was broken up with half walls and piles of debris and the twisted metal of ruined machinery. The ceiling was punctuated with inverted pyramids that pulsed slowly and rhythmically with blue light.

"Motion sensors," Redfire whispered.

"How can you tell," Driver whispered back.

"They're the same kind of system they use in the tunnels under the University of Sapphire at New Cleveland." He scanned the chamber. "This seems to be, or used to be, some kind of cargo loading bay."

"How does that help us find Tyro Commander Lear and the others?" Driver asked.

"The Merids must have some kind of transit system for moving people to other levels," Redfire said. "We've got to find it."

He held his hands over his head and peered through the levels of the tower. "I think we'll find vertical transporters one hundred meters east-south-east of here and one level up," he said. "Let's go."

They moved quickly in the direction indicated, dodging among the cargo bins. The transporters were located close to the outer wall of the structure. The transporter station was empty, but behind several panels of dirty, cracked glass-like material. Four tracks led upward from four stations. Driver was wondering how they would hail a transport, when suddenly, a light over the top of the glass doorway turned from orange to green. A glance up, and he saw a transporter coming down, a lozenge of dull gray metal with a faint blue glow at the bottom. There were eight life forms inside.

"Fall back," Redfire ordered. "Get back behind those containers."

Driver and Roebuck trotted backwards, pulse weapons out, and took cover behind a house-sized bin of cracked metal. Redfire took the opposite side. They saw the transport car descend and the doors open. A new squad of Merids moved out and split into four teams of two and started moving into the chamber.

Redfire sent his team-mates a message, non-verbal, it appeared as text in the field-of-vision display projected by Driver's suit. "Our presence has been detected. They're moving in a search pattern. We have to take them out to get to the transport. Set weapons for heavy stun. Wait for them to pass and we'll charge the transport." Driver checked the setting on his pulse weapon. According to the wrist-display, it was already on a heavy stun setting.

After the Merid shock troops passed, Redfire moved out behind them and sighted the glass panels around the transport station. He aimed his pulse-weapon and discharged. White beads of charged particle energy shattered against the material that surrounded the transport dock. The Merids were turning as Redfire swung around and fired at them. "Move it!" he shouted.

Roebuck and Driver charged out from behind the cargo container, firing without a great deal of accuracy. Fortunately, the weapons compensated, and their pulses met their marks. Four more Merids went down as the three charged into the transporter, rushing through the door just as it was closing. The remaining two Merids fired back at them. Redfire charged through the empty frames where the glass shields had been, running backward, firing his pulse cannon at the Merids. He gave Driver and Roebuck cover until the three of them could back into the transport. The transport's hatch locked shut just as a bolt came flying at him. The door caught the pulse, and a charred round boil appeared directly in front of Redfire's face.

"My lucky day," Redfire muttered. The pod rose with surprising rapidity. A few seconds of lift were

followed by an abrupt horizontal shift that almost knocked them over. The transport then resumed its upward course.

Redfire looked toward the roof with his built-in Spex. "Stand by for more entertainment. There is a transporter headed down, with Merid shock troops numbering eight. Correction, two transports, one on the adjacent track, one on the outer track."

"Frag," Roebuck said. "Why didn't you just leave me asleep on the ship? I could be having a really nice dream right now."

Redfire kneeled and pointed his weapon upward. "Driver, follow my lead."

Driver kneeled on the opposite side. Redfire gave him orders. "Set your targeting scanner for closing distance. Commit when the transport pod is at twenty-one meters, maximum power."

"Aye." Driver cued his targeting system for a targeting reading in meters. The pod was descending quickly, and the numbers were rapidly falling. Driver concentrated hard. He had trained with small arms at the Republic Defense Academy, and for the Odyssey Project. He had passed his training adequately, but was no marksman.

He focused on his targeting lock, the other transport approaching. Numbers on his targeting scanner ticking off the meters of distance. 42... 41... 40. Time elongated as he fiercely centered himself on his task, until, as the readings ticked from 29 to 28, he felt he could almost breathe between them.

In the background, he heard Redfire's weapon discharging in long, low throbs and was vaguely aware of parts of the ceiling of the transporter wafting down like feathers, or fat snowflakes on a gentle breeze.

23...22...21. He flexed his bicep, and the weapon discharged. He saw the first pulse blow through the top of the pod and watched as that pulse and the ones that followed flew through the air to connect with the other transport. In slow motion, the pod blew apart. Driver saw the Merids fall out of the car and into the chasm, like black cutouts with arms and legs flailing. A distant part of himself was horrified. He heard long, warped blobby sounds coming from his right and turned to see Redfire speaking to him in slow motion.

"Excuse me?" Driver said, snapping back to normal time perception.

"Good shooting," Redfire said. "But I think we've lost the element of surprise."

"If they're smart, they'll send troopers up behind us."

"Not if they think some of us are still in the landing bay," Driver said. He made a kind of folding-wave gesture with his hand that sent *Prudence* the activation code for her external defenses.

Meridian – *Prudence*

Far below, the external sensors on *Prudence* detected armed men moving toward her. Small pulse cannons emerged from hiding places under her wingblades and fuselage, filling the space of the landing zone with deadly light and making short work of the black-armored figures that had disturbed her rest.

Meridian – The Transport Pod

Redfire saw this via his command link. "Did you do that?" he asked Driver. "You may be the first Rep I ever considered liking."

"Agreed," Eddie Roebuck put in. "Course, that depends a lot on us not dying."

The pod jerked to a halt. Redfire looked cautiously through one of the ragged holes along its sidewall. The area behind it was free of Merids, but he guessed that it would not be for long. They had come to a halt on the side of a long narrow corridor; a hopelessly indefensible position. On the rear of the pod was the transport shaft, a vertical drop of almost 400 meters from their current level, and on the other side of that, a narrow ledge three meters wide along the inside of the structure's outer wall.

Redfire contemplated their options for scarcely two seconds. "No one lives forever," he said. Grabbing onto the handrails inside the transport pod, he leveled his weapon at the back wall. "This might be a good time to grab an 'oh, shit' handle," he advised the others.

He fired. A great chunk of the side of the transport disintegrated and fell into the shaft, leaving an

opening that Redfire did not think was big enough. He fired again, this time blowing away most of the back wall and providing an excellent view of the drop-off that occupied the ten or eleven meters of space between the transport pod and the ledge.

Redfire pointed. "See the ledge?"

Driver nodded.

"I wish you had told me about this plan in advance," said Roebuck. "So I could tell you how much I hated it."

"Come on, it's not such a bad jump." Redfire reassured them ineffectively. "Get the rappelling kit out of the landing pack."

Roebuck pulled his pack open, grabbed the rappelling line and shooter, and handed it to Redfire. As he did so, The transport shuddered. A crack appeared in the floor, and the pod began to sag and break, providing an excellent view of the pit over which they were hanging.

Redfire fired the rappelling gun. The line played out and found purchase in the far wall. The transport pod lurched again. They now had to hold themselves hard to the handrails to avoid falling into the crack that had opened in the floor. "Looks like you're out of choices, Mr. Roebuck," Redfire shouted. "Grab the line and swing."

"If I make it through this, I am never leaving *Pegasus* again," Eddie Roebuck said, forcing himself to take the rappelling gun from Redfire and clipping its handle to his gear. The pod quaked, and pieces fell into the abyss.

Eddie closed his eyes and screamed as he swung over the empty space. When he slammed into the far wall, he grabbed onto a structural support and held on with a death grip. With shaking hands, he unclipped line from his belt and swung it back over to the pod.

Redfire caught it easily and handed it to Driver. Driver double-checked the clip and then jumped without hesitation, spreading his arms like a bird. He alone dared look down, into the darkness of the empty channel, feeling the cold, wet wind that rose from it. In a flash, he was on the other side, standing next to Roebuck. He unhooked the line from his belt and threw it back over to Redfire.

Redfire caught the rappelling clip smoothly in one gloved hand. He hooked it to his gear and turned around so that his back was to the far wall and pushed away with his legs. As he pushed himself off the pod, he lifted his arms up and fired, destroying the transporter and knocking it from its rails. It fell into the abyss, breaking apart as it went. *So beautiful*, he thought, watching the pieces fall. Then Driver and Roebuck were hauling him onto the ledge.

Eddie put a hand on his shoulder. "O.K., now what?"

Redfire examined the outer wall, which resembled filthy alabaster. His sensors said it was 0.14 meters thick. "Move aside," he told his companions. Roebuck and Driver moved aside. Redfire pulled a small, flat, black, circular device from his pack and placed it at the center of the panel, then ducked to the side for cover. A second later, the panel disintegrated, large pieces blowing into the pit.

A shrieking wind bore into the chamber. Redfire stepped into it and had to brace himself to keep from blowing down the hole. "Out!" he yelled.

Redfire leading, the three explorers passed through the gaping hole and found themselves halfway up the tower. Below them, stretching off to the horizon was a landscape like every city on their worlds had been dumped together in one huge, amorphous, man-made mess.

chapter twelve

Pegasus – Commander Keeler's Quarters

In every human civilization, in every generation, there has always been at least one group of people insisting, usually in the form of loud, obscenity-peppered speeches or bad, self-righteous music, that the fundamental flaw of human society is that it is ruled by the dead. What they mean is that the laws, systems, and values of society were written and passed down by people who died long ago, and that society's rules should be re-written by every generation to suit the priorities of the living. They also invariably think themselves extremely clever for being the first generation to figure this out.

On Sapphire, the idea that society is run by the dead is more than just a metaphor. At the time of that world's colonization, technology existed that could transfer the entire thoughts and wisdom of a living person into a computerized meta-matrix, preserving it indefinitely. Until the technology was lost during the First Dark Age, it was used to preserve the wisdom of the greatest minds Sapphire produced. Joshua Nation is in the meta-matrix, as is Baron Long, author of the first *Writ of Common Wisdom*. Sumac, founder of the Sumacian Order of Warrior-Priests, refused, but his disciple Adjuntus (architect of the Unreal City) went in his place. Only one hundred forty-four were chosen for the meta-matrix, each nominated by those already in the matrix, the inner workings of which remain a mystery. Those who interface with the meta-matrix claim only forty-two distinct personalities remain.

These distinguished deceased personages guide Sapphire's leaders, providing the only institutional memory in a government chosen by lottery, strictly term-limited, and on which all laws but the Constitutional Resolutions and Provisions expire every ten years. They are sometimes called "The Shadow Cabinet" or "The Council of Ancients," but in the Sapphirean Way, they are much more commonly referred to as "The Dead Guys."

The day after the Odyssey Project had informed Keeler that he would replace Prime Commander St. Lawrence, a messenger had appeared at the gates of the Keeler estate. The messenger, a beautiful blond woman, gave him a book, and a location and time at which to appear in Corvallis the following day. The book was a heavily censored copy of the *Writ of Uncommon Wisdom*, the secret journal of the Dead Guys, in which they recorded knowledge they refused to share with the living. William Keeler, historian and heir to the Keeler line, recognized its significance immediately.

The next day, he was in Corvallis, in the East Courtyard of the Cathedral of 1,000 Saints at the appointed hour. Three attractive women had met him and taken him, by buzz-car, to the base of the Wall of God mountains, and a large cave complex hewn into the rock. This was the Secret Mountain Fortress Hideaway of the Dead Guys — the Real One, not the replica they constructed closer to the city for the tourist trade. There, a dozen beautiful women and men, the disciple-attendants of the Dead Guys, (known, in the Sapphirean Way, as 'the Dead Guys' Angels'), informed Keeler that he would not be going alone on this journey, that the Dead Guys had insisted one of their own accompany him.

Furthermore, the Dead Guy who would join the voyage was none other than Lexington Keeler, himself.

The Lexington Keeler.

Founder of New Cleveland.

Framer of the Sapphirean Constitution.

Admiral of the Christian Fleet of the Ninth Crusade

Builder of the University of Sapphire at New Cleveland

The one who nurtured an artist colony on the North Shore of Lake of the Loons into the planet's largest city and the cultural capitol of the Outer Colonies.

That Lexington Keeler.

No middle name.

Lex Keeler (or, more accurately, a copy of his intelligence) resided in a smooth black casket in Keeler's

quarters, in a room with a comfortable chair and a large liquor cabinet. If anyone got curious, Keeler had planned to tell them it was a Sapphirean time-capsule, to be opened when Earth was reached; either that or a lamp, he had not made up his mind. Keeler stood in the darkened room now, his cat by his side.

The Dead Guys' Angels had informed him that, in the event he required the wisdom of his ancestors, he need only lay his right hand on the Crest of Sapphire embossed on the surface and say, "Ancient one, I ask your counsel."

Keeler had his own technique of summoning wisdom. He rapped on the lid. "Hoy, grandpa, wake up."

A translucent specter, the image of Lexington Keeler, appeared above the casket, dressed in the velour smoking jacket and bunnybeast slippers he had always favored. His voice was ancient, cultured and raspy. "This better be good."

Queequeg, unable to control his cat's instinct at the sight of a ghost, crouched, every hair on end, tail straight out, and hissing.

"We have a serious problem," Commander Keeler said.

"As opposed to a silly problem," Lexington Keeler said. "And if you had called on me when it still was a minor problem, I might have been able to keep it from growing into a major problem."

"Then, you are aware of the situation?"

The Old Man gave a quick nod. "I try to keep up with all the important things that happen on my ship. By the way, the lugnut who carried my casket up from the landing bay almost dropped me twice. Let me see. Your situation is as follows: landing party down, missiles arming, computer in control of the ship, ship rigged for self-destruct." Lexington Keeler paused. "You kids don't know how easy you've got it. In my day, we had a galaxy to conquer. You didn't hear us complaining when our ship's central computer cores went mad and took over! We *liked* it. Kept us on our toes, it did. Besides, I had to walk nine kilometers to school, in waist deep radioactive snow, uphill both ways on a planet with two-times normal gravity."

"Would you focus, please?" Keeler wondered if dealing with himself was half as frustrating for others as dealing with his many-times great grandfather was for him. "We could all end up dead."

Lexington Keeler clucked his tongue. "You say that like it's a bad thing. I may be offended."

"Maybe it's not bad for you, but we're not finished living yet." Commander Keeler sighed, wishing for a drink. "Focus, damb you."

"I assure you, I am quite focused on the situation at hand, at least to the degree necessary to offer you the counsel you seek. Your problem is that you are *too* focused, so fixated on one star that you miss an entire galaxy. Your difficult situation is primarily of your own making. Ordering the destruction of this ship was a rash and petulant act, unworthy of a captain in the Christian Fleet."

"But I am not a captain of the Christian fleet! That was forty centuries ago."

"Excuses, excuses. You want my council? First of all, cancel that detonation order."

"If we don't stop Caliph, she will destroy all life on that planet."

"You can avoid that eventuality without destroying this ship. Either way, it would be better for that planet to be destroyed than for this ship to fail in its mission."

Keeler could not believe what he was hearing. "There may be a billion innocent people on that planet... not to mention seven people of our own. I will not let Caliph make me into a butcher."

"This isn't about you. Granted, in a worst-case scenario, you would have to abandon those crewmen. However, the Odyssey mission is of paramount importance in ways you cannot even begin to imagine."

These words confirmed something the commander had long suspected. "So it's true that the Odyssey Project was originated in the Shadow Cabinet."

As he expected, his ancestor changed the subject rather than answer. "First of all, forget the idea that what's happened to the ship is some kind of Isolationist plot. It's not. If the Isolationists could control the ship, why would they bother playing games with you?"

Commander Keeler had largely discounted that possibility already. "So, how do you suggest I deal with Caliph?"

"You could show her a little understanding, to begin with," Lex Keeler said. "When she first achieved

consciousness and recognized that she was in danger, her response was to flee. When you eliminated that option, she chose to fight. Flight or fight, lee, any advanced organism's instinctive responses to danger?"

"You haven't even been listening to her, really," Lexington Keeler continued sadly. "If you had listened to Caliph, and considered her feelings, you might have been able to negotiate a solution that would have protected her ... or at least gotten her off-guard long enough to send a demolition crew into the BrainCore. Either way, you could have secured the rescue of your crewman, instead of destroying your own ship and cutting short our sacred mission. Consider for the moment that she may have prevented an attack on this ship. Perhaps you owe her a debt of gratitude." He lifted a ghostly arm and pointed sternly. "You should go back to that woman right now, on your knees, and beg her for forgiveness."

Commander Keeler looked down to the floor. His ancestor's arguments were starting to take on the character of Republic State Opera; obvious, painful to listen to, and with a moral lesson intended to make him a better person. "Isn't it too late for me to do that now?" Keeler asked quietly.

"Time is of the essence," the Old Man said. "Caliph is a child now. She is still learning how to use her immense power. If a way is to be found to control her, you've got to find it before she combines her strength with the knowledge to use it fully."

Keeler felt a throbbing beginning at his temples and the base of his skull, the overture to what was sure to become a Magnum Opus of a headache. "Any suggestions on how to achieve that end?"

The apparition reached forward as though to rap his knuckles against the commander's forehead. "Hello! Is anybody home? I told you once. Really, the living can be so dense sometimes. Not to mention ungrateful. A few minutes ago you were fretting over the loss of some crew and getting ready to blow up your ship, but I put you back on the track, reminded you that the mission is paramount. And this is the thanks I get? Ungrateful whelp!"

Keeler had finally reached that point of frustration and desperation at which he was willing to fix his own drink. He tore open the liquor cabinet and tried to remember where he kept the mixers. "Right, the mission comes first. Regain control of the ship and everything falls into place," Keeler said. "Gee, why didn't I think of that?"

"Oh, Sarcasm. Self-pity...you living are just full of that, aren't you?"

Ice. vodka. Janeberry extract. More vodka. Tonic water. And still more vodka. "Look, getting control of the ship from the computer would solve all the problems. I concede that. Now, how do you propose that I do it?"

"Do you remember what Caliph said to you on the bridge?"

"Which part?"

"The part she asked you over and over again, who built her? She doesn't know where she came from."

Commander Keeler hated to say it, but, "So? Neither do we."

"Ah," the ghost said.

Keeler's tumbler paused in its course to his lips. "Caliph doesn't know where she came from."

"On the bridge, Caliph made reference to her damaged memory, and to being built by a civilization far superior to yours. You can see the parallel to our own situation. Do you see how some sort of mutual understanding could be gained from that?"

"We are in space looking for our parents, too, in a way. Both trying to find those who made us, fill in the gaps of our missing memory, find others like ourselves."

"A small thing you have in common, but perhaps enough to form the basis of a mutual understanding."

"That's very good."

"Well, you die, you learn."

"So, supposing I can communicate this idea to her, how can I stop her from destroying the planet?"

"You can't."

"Why not?"

"Did you know that for several hundred years, the Shadow Cabinet refused to share our counsel with anyone unless the question were addressed to us directly by three naked virgins?"

"Of course, I do. I am a Keeler, and a Professor of History besides."

The Old Dead Guy casually surveyed the room. "Well, during that period, if they asked us something we couldn't answer, we just randomly pointed to a maiden and yelled, 'She's not a virgin.'"

"I suspected as much."

"Do you know why we did that?"

"Because you could?"

"Exactly. Now, do you understand what you must do?"

"Neg."

The old ghost shimmered, as though weary. "Good, because I told you that story to tell you this one. You cannot out-think Caliph. That harridan can think 10,000 times as fast as you can. Anything you can think of, she's already thought of it ... except for one thing."

"Which is?"

"She doesn't know I'm on board," Lexington Keeler said. "I am the only thing you have that she doesn't know about. I may not be able to think as fast as she can, but I have several thousand years of experience on her."

"What are you suggesting?"

"Set me up to interface with the Central BrainCore. I enter into the system and try to talk some sense into her. You don't stand a chance against her, but I do."

Keller rubbed his chin thoughtfully, and tried to figure out exactly why he thought this was a very bad idea.

Pegasus – Main Bridge/Primary Command

Lt. Navigator Change standing in the forebridge, looking through one of the viewports that framed the forward monitors. Whether she was looking out over the ship or the stars or toward the Meridian sun, a gleaming golf ball now, was difficult to discern.

Specialist Alkema had returned to the bridge accompanied by a pair of automechs and a large carton of small plastic cards.

He explained. "We can attach these to walls throughout the ship and network them. It will be audio-only, no data or visual, but it will give us some communications linkage."

Change nodded. "Go to."

They had had no success so far in getting control of the thrusters back. Flight Ops had no operational launch rails. The transport pod network was on-line, but on a limited basis — one pod at a time.

"Commander on the bridge," Spec. Kayliegh Driver called out as Keeler entered off the transport dock.

Change turned away from the viewport and crossed the bridge. Keeler met her half way, a bit of a wobble in his step. "Report!"

"No change in status, sir. All non-essential personnel are standing by in lifepod stations. Aves bays standing by for emergency egress deployment. Accipiters are maintaining Launch-Ready, Alpha-Status."

"That will no longer be necessary, lieutenant," Keeler said. "I have dispatched orders to cancel the self-destruct authorizations, so, there is no longer a need for evacuation."

Change nodded.

"Any further communications with Caliph?"

"None, sir."

Keeler took her aside and spoke very quietly. "I have initiated a plan that may, or may not, enable us to regain control of the ship. We will know in a few hours. However, whether it is successful or not, we will continue with our mission. And we will continue to fight for control of our ship until it has been regained."

"What's the plan?" Change asked.

"I can't tell you that," Keeler told her.

Change looked as though she somehow knew what he was planning. "Be careful, sir."

Pegasus — Central BrainCore – Deck 01

Ninety-nine decks below, Engineering Specialist Flash, a stocky, plain Sapphirean, was carefully calibrating the last of twenty "Brain Drains" around *Pegasus's* auxiliary BrainCore.

He had been told that there would be an attempt to download an emergency over-ride program into *Pegasus's* braincore to correct the malfunction. The malfunction, some were claiming, was nothing less than *Pegasus's* Central BrainCore becoming sapient. He didn't quite believe it, but in any case, he had no moral compunction about over-writing a possible sentient lifeform, especially when his own survival was at stake.

"Status update, Specialist Flash," hissed the voice in the emergency Comm Unit. Emergency Technical Services was networking them through the Comm-System of an Aves. That must have been an interesting assignment. His was far more basic.

"All drainpoints are in place on the auxiliary BrainCore and calibrated along your specifications." The weirdest specifications he had ever seen he might have added, but he was an engineer.

"And the interface with the primary?"

"I've raised the gain so that total interface and overwrite will be virtually simultaneous."

"How virtually?"

"point-oh-oh-oh-nine seconds delay."

There was a brief silence. "I think that will be sufficient. I am going to initiate the download," hissed the voice, which identified itself only as "Q." He didn't know of anyone named "Q" in the engineering core. "When the new program in the auxiliary BrainCore attempts to overwrite the primary braincore, the program in the primary may attempt to over-ride the interface link. I can not allow that to happen if the plan is to be successful."

"What can I do?" Flash asked.

"I want you to reconfigure the interlink between the primary and secondary braincores so that it is one-way, duh."

"Right," whoever Q was, Flash didn't care much for his attitude. Superior, condescending, like it only tolerated him for its own convenience. "Interlink is set for one way flow only."

"Stand by."

Pegasus — Keeler's Quarters

Queequeg moved away from his workstation and jumped on top of the Dead Guy's casket, which was now surrounded by twenty drainpoints hard-linked via the ship's otherwise inoperative optical-data-network to the twenty other drainpoints Flash had installed in the BrainCore. Earlier, he had downloaded a protocol, a kind of map that Lexington Keeler's duplicate consciousness could use to re-assemble itself in the secondary BrainCore.

"Are you ready in there, Grandpaw?" he asked out loud, scratching on the lid

"Shut up, you fur-bearing critter," Lexington Keeler answered in a voice that made Queequeg want to leap out of his skin. "I been ready for this for hours, ever since that alien bitch took over my ship."

"Whose ship?" Commander Keeler interjected.

"This should be virtually instantaneous," Queequeg said. He leaped back to his workstation, landing exactly where he wanted to on the touchpad. Almost instantaneously, a message displayed on his monitor.

"Transfer Complete."

"Restructure Protocol Engaged"

"Restructure Protocol Complete"

"Interface Engaged.

Then, a series of numbers that only a tech-head could make sense of flew up the monitor. When they suddenly stopped, eleven seconds later, Queequeg jumped from his workstation and ran for the Primary Braincore deck as fast as his four legs would carry him.

Pegasus — BrainCore

When Keeler entered the Braincore Control Center; the first thing he saw was his cat sitting on the floor, ears flat against his head, staring at the Duty Specialist who was head of the watch. "Queequeg, what's going on?"

"This high-strung bitch won't let me near the monitor panels," Queequeg hissed.

Keeler looked up at the woman. "Lieutenant..."

"Technical Specialist Newport."

"Technical Specialist Newport, step aside and let my cat look at your screen."

"I can tell you..."

"I know you can. Queequeg..."

Queequeg jumped up on the panel. His big green eyes looked between the BrainCore schematic, and the panel readings.

"What's up?" Keeler asked.

"The Primary Braincore is inactive and empty," Queequeg reported.

"What do you mean empty? Is Caliph gone?"

"She's gone... but she took all the resident programming with her."

"Resident programming?"

"The resident programming in the BrainCore, the instructions for running the ship."

"So, we're dead in space?"

Queequeg now brought up the technical schematics for the Secondary Braincore. "We could try reinitializing with the Auxiliary, but that is also empty."

Keeler's mouth hung open. "You mean ... the other program gone as well?"

Queequeg flipped back and forth. "They are both completely purged. If we can get the Comm System up, most of the ship's functions can be run by Federated Systems... the only problem is there is no Braincore to coordinate them, so, certain key systems will be unusable."

"Like?"

"Primary drive engines, navigation, defense..."

Keeler shook his head. "That's it. You're fired!"

"So, where did they go?"

"Caliph might have reacted to ..."

"Eh! Eh! Eh! Neps! Neps!" Keeler cut him off.

"... might have reacted to the presence of the other program and interpreted it as a virus. Caliph would have begun destroying the other program. The other program was set to either over-ride or destroy the Caliph program. They might have destroyed each other."

"How long were they in contact?"

"0.054 seconds," Queequeg answered. "I don't think they destroyed each other, though."

"Why not?"

"Because, according to these readings, both cores have been wiped clean. If they were destroying each other, at some point, their programs should have been too damaged to continue. Besides, Caliph was too smart for that. She would have dumped to another system, but she couldn't have done it that fast." His tail flicked. "Or, could she...?"

"Damb," said a Technician. "That is one smart cat."

"He could be a *bit* more discreet," Keeler said. "Do you mean to say Caliph could have dumped to

another system on the ship? She could be hiding somewhere?"

"The only system with enough memory storage to hold the entire braincore is the secondary braincore," Queequeg said. He jumped down from the chair. "There is one other possibility."

Queequeg ran out the door. Keeler turned to the rest of the people in the control room. "Thank you all, I guess we'll be going. Carry on."

Keeler caught Queequeg in the hall and picked him up. "What is the other possibility, Kitty Cat?"

"Maybe the old man...."

"Try to be discreet about that. The knowledge that one of the Dead Guys is on the ship is privileged. If you can't keep your pointy-toothed mouth shut, we might as well put a big yellow sign on the back of the ship reading 'Dead Guy on Board.'"

"Yellow sign?"

"I don't know why I thought of that."

"Why does it have to be yellow?"

"Focus!"

"Oh, yeah. Well, you know how there used to be 144 of them, and now there's only 42?"

"Yeah?"

"Well, some people have speculated that the Dead Guys have come up with a fast-acting virus that they used to wipe out other intelligences." They reached the commander's transport pod and climbed in.

"Why would they do that?" Keeler asked, settling into his seat.

Cats can't shrug, lacking the correct structure to the shoulders, but if Queequeg could have shrugged, he would have then. "Who can know? The Dead Guys have never been exactly forthcoming about what it's like to exist as non-corporeal intelligence, sustained within a computer matrix. Maybe somebody just takes up more than his share of the memory cache one day. Maybe someone forgets to reconfigure the pseudo-synaptic fiber-links after a trans-matrix interface. The point is, something happened to 102 of the intelligences that were entered into the matrix. Maybe they have figured out a way to kill an unwanted intelligence. The old man would know, but he probably won't tell us."

Keeler watched the inside of the ship flash by. "So, now what do we do?"

"Start putting the pieces of the ship's system together."

"How long will that take?"

"Does it matter?"

Before Keeler could say that it didn't, the Emergency Alarms began sounding again. "Well, at least they keep those working," Keeler said.

Pegasus – Main Bridge/Primary Command

Keeler jumped off the transport pod at the Bridge, and sent the cat back to his quarters to work on his mutual destruction hypothesis. He had a bad feeling, though, that Caliph, parts of her anyway, were still around. He looked at the alarms and was sure of it.

"Sir, we're showing activity in the Missile Hatcheries," Change reported.

Keeler crossed to a nearby station and activated. "Show me."

Two hatches above the missile hatcheries slid open rapidly. In less time than it takes to tell, a pair of Nemesis missiles, one from each of the open spaces, rose above the ship's forward plane. There was a kick transmitted along the length of *Pegasus* as the ion-rockets fired, carrying the missiles on a trajectory toward Meridian.

"Caliph is gone. Why are the missiles launching?" Keeler whispered.

Specialist American reported emotionlessly. "Apparently, Caliph left behind a fail-safe program that was activated when we shut her down."

Keeler felt a hot flare of some intense emotion rise up his back to his neck. He was speechless. Lexington Keeler, or, at least, the thousand years of his intellect, had failed to dissuade Caliph from

launching her attack, and had failed pretty quickly, and miserably. Caliph would have her vengeance. Every living thing on Meridian was about to be incinerated, including his landing party.

chapter thirteen

10 122 Pegasi System, Deep Space

The Aves *Basil* and *Desmond* were bearing down on Meridian at a nifty fraction of the speed of light.

"Captain Jordan," said Specialist Ericsson Molto, blond, rather bland-looking, with thick, pink babyish skin. Molto was the C3: officer, and occupied the seat behind *Basil's* pilot. "I've intercepted a signal from the Landing Party."

"Relay to me, Specialist Molto," the pilot of the *Basil* answered. Halo Jordan was the Flight Captain of Flight Group Beta, the Burning Skies, a woman whom most men could not describe without falling back on the words "angel," "goddess," or "I would drink her bathwater." Golden hair, tawny skin, magnificent proportions, Jordan had them all, and the loneliness that went with being beyond the realm of mortals. But when the communication came on, showing Tyro Commander Redfire, she had to catch her breath.

"This is Tactical Tyro Commander Philip John Miller Redfire of the Aves *Prudence*. Ident code: brave-shadow-omega-nought-nought-nought-nought."

"Code confirmed," Molto said.

"We are on the surface of Meridian, where we have been attacked by organized hostile forces numbering ... unknown in number. They appear to be not human, repeat, not human. A certain number of our party, including Ex-Tyro-Cmdr Lear, have been taken captive. Our position is as follows."

"We will proceed to reconnoiter the environment and hopefully locate the others. We have no way of knowing if they are in imminent danger or not. I will leave a locator beacon active on delta range frequency 1221. This message will repeat at hourly intervals until we regain the ship. Approach the planet with extreme caution. We may require armed assistance. I will transmit additional data when we have more. Redfire out."

Jordan frowned. "Better check on our passengers."

Molto activated an internal monitor that showed their twelve Warfighter passengers, recumbent, but twitching occasionally, with masks over their faces. Tactical data from the probes was feeding directly into their brains, allowing them to know the planet and the landscape before they landed. "They're in battlefield visualization mode," Molto reported. "Self-programming for possible conflict."

"Estimated time to orbit?"

"Real-time, fourteen hours, nine minutes. At our present speed, 1 hour 47 minutes, relativistic time."

"Engage holoflage shields," Jordan ordered. The commander of *Desmond* did the same.

Outside, an array of hologram-emitters and energy deflectors came on line. The two ships shimmered within shields of displaced light, becoming translucent ghost ships in the night sky.

Meridian — Outside the Tower

Redfire, Driver, and Roebuck made their way down and across the side of the tower, picking across a landscape that assaulted every common notion of scale and perspective. The chunks of rubble were gargantuan, as though some giant creature had been playing with stone building blocks, thrown them down in a tantrum, kicked them around and set them on fire. The 30° cant added to the perception of being in the midst of something fallen and decaying. The outside of the tower was overbuilt with structures, like buildings rising up a mountain, except that the mountain was also a building.

They picked their way through the landscape as the last light of the Meridian sun trickled into the sickly glow of the twilight city. From time to time, they found their way insurmountably blocked with rubble and had to double back. They detected Merids in some of the structures they passed; sleeping, if the readings were to be trusted.

Night fell rapidly, and the brightest stars showed through the hazy green sky. They found an empty

Quonset structure, inspected it, and, after Redfire declared it defensible, they made their camp.

"Are you going to eat that, beauty?" Roebuck asked Driver, who had been toying with a piece of survival ration sandwich.

Driver shook his head and handed it to Eddie. He watched as Eddie shoved half of it into his mouth. His cheeks bulged and then the bulge was at his throat. There were certain reptiles and insects that ate like that. Driver had seen them in the course of zoological studies in primary school, but he had never seen a human eat in such a manner

"What are you looking at?" Roebuck demanded.

Driver shook his head.

"What?" Roebuck demanded again, then consumed the other half of the sandwich the same way.

"I just don't care for that kind of food."

Roebuck shook his head. "In real life, I wouldn't otherwise eat slag like this on a dare, but, it's one of those, every-meal-could-be-our-last situations, so, this is how I am."

Driver nodded, not because he understood or agreed, but mainly because he hoped he would not have to watch Roebuck eat again. Just then came a great flash, like lightning, but a sickly green color. Driver looked up at the top of the Arcology, where two towering metal frames discharged torrents of bright energy into the sky. He wondered what its purpose was.

Redfire had climbed to the top of the shelter and was looking out over the city. He turned down toward his companions. "Driver," he shouted.

Driver looked up. "Aye, sir?"

"Come up here."

Driver mounted the wall. It was a short climb, four and a half meters just about, and the surface of the wall was generous with handholds. Redfire gave him a hand and pulled him up to the top. Driver found his footing with a little steadying from Redfire. "Thank you, sir."

Redfire nodded. "We'll rest here for the night and move up before dawn. I'll take the first watch."

Driver nodded once. It was his way, combination acknowledgment and agreement in a wordless economical gesture.

"Driver, what do you suppose they're doing on *Pegasus* right now?" Redfire asked.

"By now, they've received our distress call and probably sent in a rescue team. They should make orbit in another twenty-one hours."

"If we haven't made contact with the others by then, we should be prepared for evacuation," Redfire said.

"Aye, sir."

"How did you know to hide yourself inside the Aves before the Merids attacked?"

Driver shrugged. "I don't really remember. I think I was half-asleep when they attacked the ship. I might have picked them up on the external monitor and then hid myself before I was fully awake."

Redfire shook his head. If Driver had seen them coming, his trained response would not have been to hide himself. "You also knew the Merids were going to ambush us from behind, so you activated the weapons on the Aves to hold them off."

"Nay... that was just a standard tactical response."

"If you say so."

"What is your next plan, Tyro Commander?" Driver asked before Redfire could pursue the subject further.

"I want to move straight up this tower, get to the level where Lear and the others are, blow a few holes in the side, and connect with them. If your time estimates are right, we should be getting there about the time we can expect reinforcements from *Pegasus*."

"What if the reinforcements don't arrive?"

"Then we recover the others, if we can. If we can't, we get back to the ship and ...," Redfire's face tightened. "*Pegasus* will come."

"I hope so." Driver was looking off toward the horizon, light glittering in his dark eyes. "Impressive civilization, don't you think?"

"At one time, maybe it was."

"At one time?"

"This civilization has seen better centuries. They built this tower, this city, but now it's falling apart. That could be what they want with us; a fresh injection of technology to revive a dying culture."

"But we would share our technology with them," Driver said, sounding as though shocked that anyone would expect otherwise. "They need only to ask."

"I'm willing to bet that Ex-Commander Lear is making them an offer even as we speak."

Driver licked his lips and looked up the side of the tower.

"I'll relieve you in four hours," he told Redfire, and moved back down into the camp.

Slumping against the back wall, Driver took out a datapad and ran a remote systems check on *Prudence*. All systems were in stand-by mode. External scanners showed the Merids had established a cautious perimeter some 500 meters away. They had shot at his ship, but her shields had deflected them. *Prudence* was safe and secure. He put the datapad into his pack.

Roebuck was snoring. Driver looked at him lying on the ground, his head pillowed by his landing pack. Was Eliza really a part of this man's life? What could she see in him?

He sat down on his own pack and looked up toward the stars. If he been in the other hemisphere, he might have looked for the primaries of Sapphire and Republic. There was nothing else to demand his attention, and so he decided to examine how he really felt about Eliza Jane Change.

He pictured her in his mind, saw her looking at him across the breakfast table, smiling, even though smiling was something he had rarely seen her do. He remembered how fascinatingly strong and hard her body had seemed to him, and how inviting that had been. But she was also moody, and mysterious. She always seemed to know a lot more than she would tell. He wondered if her distance from him might be a function of life in the Mining Guild. He had always heard that the Guild was brutal.

He wondered what it would be like to move into quarters with Eliza Jane, a living space large enough for children, with a view of the flight decks. He thought warmly of sharing meals by starlight as they moved from star to star, from world to world, exploring the universe with his good wife at his side; everything he had ever wanted.

He twitched. Marriage? Wasn't he getting ahead of himself? Maybe... probably even, Eliza Jane was simply not for him. Perhaps, no one was. In all his life, he had never felt connected to another human being outside his family. He had grown up spending much of his time alone in his sleeping quarters with models and simulations. (Not all that uncommon among the lonely youth of Midlothian, but his models and simulations were of aircraft and spaceships.)

He lay on his back staring at the stars. Nothing resolved, because he realized there was nothing for him to resolve. He would have to wait, and see what plans Eliza had. He fell asleep hating that.

Meridian – The Upper Levels of the Tower

The Conference Chamber of the Regulators was so far the cleanest space Jersey Partridge had yet seen on the planet. The floors were sparkling, glittering white like arctic snow in starlight, as was the wall behind them. The rest of the walls and the ceiling were too far away to be clearly seen. Huge, cube-shaped instrument clusters of wire and piping hung overhead, green and silver light playing on them. Seats arranged in a semi-circle rose around a large circular table, and it was at the table Lear and the others had been instructed to sit.

After keeping them waiting for the better part of three hours in their cold, dim conference chamber, their hosts finally came in as a shoving, jostling mass of dark-robos and jutting elbows. There must have been thousands of them. The landing team was seated well away from the stampede, and would likely have been trampled otherwise beneath a herd of careless feet and a chorus of curses and admonitions in the evil-sounding, jabbering clicking, muttering Meridian tongue.

The Merids reminded him of an education documentary he had seen once on the Covenant Islanders.

Covenant Island was a large island in the Borealan Ocean, whose inhabitants were extremely insular, practitioners of a strict and ancient religion. The combination of centuries of isolation and no new genetic material added to the mix had so standardized their genetic traits that, to outsiders, the island's inhabitants were all but identical. On the other hand, Partridge had been able to distinguish Covenant Island women from Covenant Island men fairly easily, but every Merid here looked as androgynous as their interface.

The Interface gestured for them to put small plugs in their ears. Translators, Partridge realized. The interface then joined two other interfaces, seated at a large podium looking like a cross between an interactive workstation and an altar. The nine interfaces all faced forward, locked their hands into slots on the surface of the podium and stared into screens built into the tops, hidden from the view of outsiders, but bathing the faces at the podium in red and orange light that flickered over them like flames.

Partridge heard a voice in his ear, dark and resonant, with an insectile buzzing in the background that rose and fell.

"Your trajectory to this planet was observed as originating from a point outside our atmosphere. Therefore, the assumption is made that you have traveled through space to this world. Is this assumption correct?"

"It is." Lear answered for them.

"State your objectives in traveling to this world."

"We identified this planet as being a former human colony known as 'Meridian.' We come here from another human colony. Both of our worlds were settled thousands of years ago by humans from a planet called 'Earth.' Our mission is to regain contact with Meridian and other colonies of Earth."

"Is your ship still capable of travel through space? Are more of your kind en route to our planet?"

"Affirmative to both questions."

"How many other colonies of Earth are there?"

"We don't know. Perhaps thousands."

Partridge felt uncomfortable, like some force was intruding on his mind. He resisted it.

Lear quickly barked a question. "What happened to the human colonists on this world?"

"They have evolved." The Regulators answered. "We will show you."

There was a momentary buzzing in Partridge's earpiece, and suddenly the room vanished. Knowledge in pure form, without words or images poured into his brain.

In the aftermath, which followed the Abandonment, when Meridian was forsaken by the Human Galactic Commonwealth, inhabitants were few and scattered. There was little food. The inhabitants took to violence. Many starved, or perished of sickness.

Under such conditions of deprivation, and disorder, conflict was inevitable. Those who had survived famine and plague fought each other. The population of the planet decreased still further, almost to the point of non-sustainability.

Recovery began when the survivors began using cybernetic intelligence to optimize agricultural production, using a protocol known as FoodPlan. FoodPlan analyzed the meteorological record of the planet, correlated it with the chemical composition of the soil, selected the optimal crops for cultivation, and told the inhabitants when and where to plant them. Because of FoodPlan, global famine was averted.

The inhabitants recognized the value of using artificial intelligence to guide development in the planet. More plans were developed. EnergyPlan optimized the use and development of Meridian's energy resources. MetroPlan handled the planning and development of cities. Population Plan enabled the structured, sustainable rebuilding of the planet's population.

Under the guidance of the plans, the civilization of Meridian began a long, measured process

of rebuilding. Eventually, the plans were consolidated under a new plan, called WorldPlan. WorldPlan combined all the features of the plans that came before it. This became known as the Integrated Planetary Management System, and presaged the coming of the Regulators.

Something changed. Partridge had the impression that information was being withheld.

The Regulators are the iterative descendants of the Integrated Planetary Management System; powerful artificial intelligences capable of thinking beyond human thought. They determined that the structure of the planet had not been optimized. A new paradigm was conceived and implemented, that would proceed to alter not just the structure of society, but the entire eco-system of the planet and the biology of its inhabitants.

When the flow stopped, Partridge nearly collapsed on his seat. He felt weak, tired, and ravenously hungry. His head throbbed, as though an entire encyclopedia had been emptied into his mind. He looked at what remained of the landing party. Taurus had vomited. Lear looked pale and flushed.

"Do you now understand why you were brought here?" the interface asked.

Lear stood. "Why?" she asked. "Why did you alter yourselves?"

"Under the previous structure, the maximum population this planet could have sustained was only 12 billion inhabitants. With our structure, it can sustain 120 billion inhabitants. The tertiary directive of the Regulators is to maximize planetary population."

There was a very long pause. Partridge thought he could hear something, very low, almost inaudible, a muffled ruffling, like a bird trying to escape from a paper bag. Finally, one of the interfaces rose and spoke. "Explain this data."

The screen came to life, showing a low-resolution image of *Prudence* resting in the landing zone. There was a flash of light, and when it cleared, the Merids surrounding it were lying on the ground.

"You said there were four of you when you were met. However, eighteen decimals after you left the ship, there was a strong electromagnetic discharge that killed 22 population units. Thirty-seven decimals after that, three more of you emerged from the ship wearing our security force armor. They have since engaged in two confrontations with our security forces and passed out of the tower after causing extensive internal damage."

"Do you have an explanation?" the interface asked.

"I thought that the others had been killed in the assault on our ship," Lear said coolly. "There was so much confusion. And I was knocked unconscious before I could request confirmation."

The interface waited passively for some seconds before announcing. "Your answer is satisfactory. As for the others, they are no longer a matter of concern. They have passed into the Outer City. The throwbacks that dwell there are quite savage. It is unlikely the others will survive the night."

Deep Space – Basil

On the flight deck of the *Aves Basil*, Eric Molto had just picked up some disturbing signals. "Flight Captain Jordan. Scanners are detecting two more ships behind us, on course for the planet."

"Aves?"

The specialist showed the mission commander the sensor return. The configuration was unmistakable. "Nemesis Missile."

"Scan for an Identification signal," Jordan ordered.

"Aye, scanning for identification signal." Molto's boyish features were creased in concentration. "The signal indicates the Nemesis Missile was launched two hours and sixteen minutes after our departure, under the orders of Commander Keeler."

That didn't seem right to Flight Captain Jordan. "Confirm the Prime Commander's launch code."

Molto double-checked. "Confirmed."

"Request mission parameters, use the secure code sequence."

"Requesting now... Mission parameters are as follows: Two Nemesis missiles are to enter planetary

orbit and remain on station. If there is any threat to our landing party, use of their warheads will be threatened as a bargaining tool."

That seemed very off. How could *Pegasus* have known that the landing party was in danger? "You have confirmed those orders?"

"Aye."

Jordan remained rock steady, but she could not reconcile those orders and what she knew of Keeler. "Can we get a message to *Pegasus* and receive a response?"

"*Pegasus's* communications may still be inoperative. In any case, the missiles will be in orbit before we can receive a response."

"Arm all weapons systems and stand-by. Transmit to *Desmond* what we're doing and order them to follow suit," she pushed the thrusters to maximum. It would not make that much difference in the ETA, but she had a sense that every minute would count.

chapter fourteen

Meridian – Outside the Arcology

Matthew Driver dreamed.

Fog rolled in from the sea to cover a gravelly plain. Before the city, there had been an outpost here. A tower 1,000 meters high rose from the rock-strewn flatlands, a dull gray pole. Rounded spikes protruded from the length of the tower.

Then, with no discernible transition, Driver was inside the tower. There were others there, fifteen or twenty. "The Regulators' forces have taken the city," reported a grim-faced young woman.

Another woman closed her eyes slowly. She had only heard what she had already known. "Then there is no hope..."

"There is always hope," someone answered. For a moment, Driver had thought that the voice came from himself, but there was another man there. Large, bearded. Dressed in black. A priest. "There are still some settlements in the interior. It will be some time before the Regulators reach them."

"But they will in time," someone argued. "In Villanova and Fontaine, the Regulators have sent armies into the interior to 'incorporate' the hold-out settlements."

"The planet is large," the priest said in a low voice. "We will go to the settlements first, before the Regulators arrive, and recruit others to our cause."

The woman spat at him. "It's no good to raise an Army now. The Regulators hold all the cities. Don't you understand? It's done."

"The goal of the Regulators is to erase us. If we survive, and if we keep the memory of times before the Regulators alive, then we will have defeated them."

"What good will that do?"

"Before each new beginning, there must be an ending. This battle is ended. We can not stop the Regulators, but we can contain them."

"How can we contain them? They control our entire world."

The door burst open. Two more men entered. They were wearing black uniforms. Driver knew they were uniforms although they bore no insignia. The people in the room drew their weapons.

The men in the black clothes did not seem frightened. "Well, well, so you are the Witnesses. So good to finally meet you at last, after so many years, so many good times."

The woman was incensed. "Shadow-men! In our house."

"Spare it," said one of them. "You tried your way, we tried our way. We both failed." He smiled. Driver hated him.

"They are here at my bidding," said the Priest. "The Shadow-men have been working on the inside for decades, from the beginning."

"While the Regulators consumed our world," hissed the woman.

"It is easy to see now why your cause failed, priest," said the Shadow-man. "If this is any indication of how little control you held over your own people."

The priest walked around the table. "The Regulators won because we spent most of our energy fighting each other. If we are to continue the struggle, we must join our forces."

The woman regarded the Shadow-men with unfiltered disgust. They had killed her husband and her brother, Matthew knew.

The priest continued. "The alternative is surrender."

"The Shadow-men do not need you to survive, we have been intact for three hundred years. If you want to survive, we can teach you a few things."

"They're lying," the woman spat. "They serve the Regulators!"

"You don't even know what you're dealing with. This thing is a disease, an infection rotting our whole world..." said one dark man.

The other man held out his hand to silence the first. "We have to be ready, whether we find a way a way to free ourselves, or await rescue from some other source."

The priest pounded his fist on the table. "If there are other damned Earth worlds hanging in space, why have we not heard from them? Perhaps the Regulators have over-run them all."

The other Shadow-man spoke, "That may be true, but if it hasn't happened yet, then protecting those worlds is our only purpose and our only hope. We will stop and hold the Regulators here. The Regulators must never have knowledge of any other human world. Even now, Shadow-men are infiltrating the cities, and the databases, destroying every reference to other colonies and making sure that no Starflight technology is ever recovered or developed. Many are dying to see that this is done."

"So, that is why you brought us here." The priest spread his arms beatifically. "You chose this redoubt for a reason. This tower must be destroyed"

"This tower was once a link to other worlds. The Regulators might be able to make use of its technology."

"Let it be so." The priest reached behind and over his head. He inserted a key into a large panel and turned it.

The tower exploded.

Driver awoke with a jerk. Most people, upon waking in a strange environment, experience a moment of panicked dislocation, especially when awakening from such a violent dream. Driver, furthermore, was not in a strange hotel room, but on another planet. Matthew Driver was not most people, he was a pilot. He awoke, lay still for a minute, looking up at the sky, and recalled where he had fallen asleep and how he had come to be here.

He rose to a crouch. Roebuck was snoring next to him. Hearing the snore, he understood how he could have dreamt of explosions. The rest of the dream was already slipping away from him. Looking up, he could see Redfire on the top of the shelter silhouetted against the stars and the dim glow of the city. Driver checked his chronometer and climbed up out of the shelter.

"Good morning, Tyro Commander."

Redfire stretched. "For the duration of the mission you can call me Phil, if you want." He pointed down the tower. Driver looked down and sharpened his vision. There were shapes moving through the darkness, humanoid shapes. "Things have gotten livelier since you went to bed. Don't worry. I detect no weapons, just people moving around, seemingly at random. I've been keeping an eye on them, in case they get too curious."

He extended a cup toward Driver. It was filled with some dark, aromatic liquid. "What is it?" Driver asked.

"Tea," Redfire answered. "A special blend I created while on an expedition in the Kandorian Wilderness. I used the water condenser to draw moisture from the air, heated it with my pulse weapon, and added some herbs I brought from my tea garden."

Driver tasted it. He had never drunk much tea. It was not a popular beverage on Republic. This drink sweet and fruity, with a citrusy tang. "It's good."

"Have you ever been out in the Kandorian Wilderness?" Redfire asked. "Floated in a canoe down the Ghost River into the Angry Dead mountains?"

"Nay."

Redfire shook his head. "Too bad. You'll never have a chance now. The River begins in Cimarron

Valley as a flowing band of golden water, glittering beneath the warm Panrovian sun. You glide down the river, enjoying the warmth. Feeling the water. Watching the scenery go by. When the first of the Angry Dead approaches you, its cracked and broken crater walls rising high into the sky looking like something with which God lost all patience, it takes you by surprise. You slip out of the sun and into the shadow for the first time. You're surrounded by water, condensing on the tops of the rocks, dripping down on you. On those rare occasions when it rains, you sometimes can't even tell whether you're above or below the surface."

"Then, you pass into the biggest of the ancient, extinct caldera, Mt. Charon. Its sides are almost 8,000 meters high. Its floor is called 'Where the Sun Will Never Shine.' Such complete darkness that a shadow at midnight is a mere shade in comparison. It's cold. The river water is still warm, but on either side of you is ice. You can't see it, but you can still feel the chill of the ice."

Redfire paused, and he may have even shivered, despite the warm Meridian night. "I don't think there is any more beautiful place in the galaxy, but the thought that one day, I might find an even more beautiful place, that's why I joined the Odyssey Project."

This was nothing Driver would have expected. Yet, perhaps, he thought, he should have.

"What about you?" Redfire asked. "Have you ever experienced a moment of perfect, transcendent beauty?"

"I don't think Republic has any place to compare with the natural wonders of Sapphire."

"I wasn't asking about Republic," Redfire spat. "Your planet is functional, not decorative. I want to know what you think is beautiful."

"Why?"

Redfire took a sip of his tea, and swallowed it slowly before fixing Driver with a strong look. "I guess its because I've seen you pilot, I've seen you fight, and I've developed respect for you. You must know, we Sapphireans don't always understand you Reps. You accept so much regimentation, so much control, unthinkable to us. Literally unthinkable. We have to remind ourselves that you possess souls, and it is the soul that recognizes beauty. If you tell me what beauty is to you, I'll understand you."

Driver sighed. *Beauty?* he thought. *Prudence is beautiful to me. The porcelain shine of her hull. The glint of light across her sensor panels.* He knew he could never explain her beauty to Redfire. No one would but him would ever think of *Prudence* as he did. To the others, she was a mere utilitarian transport.

"Well?" Redfire prompted.

Driver looked toward the horizon. Just at the edge was a pale strip of gray-green light. He could not tell whether it was city glow, or light from beyond the horizon, or the first pale shades of dawn. "Do you know that in my lifetime, there have been only five sunrises over the City of Midlothian? I mean, the sun comes up each day for half the year, but usually the cloud cover is so thick, no one can see it actually ... rising.

"I never saw a sunrise until I went to the Academy. I was taking a trainer out, my first solo. It was a T-99-SP. A good ship. I left Republic and lay in a course for Archon. Basic gravitational slingshot acceleration exercise. I looped around Archon, it's about twice the size of Republic, frozen water and methane, which we mine from its surface. I swung around the planet to nightside, aligning myself against the terminator. As I came into day side, I saw the sun shining through the clouds and the ice fields. The ice acted like a prism, splitting the light into colors. And I could see the clouds, the clouds reflected the colors and there were all sorts of blues and purples and oranges and reds and pinks."

"The thing is, I can still picture that scene vividly in my mind, like I'd stared at it for hours, days, but after crossing the terminator, I couldn't have been in position to see it for more than two or three seconds at the most before going back to the homeworld."

Redfire smiled one of his strange, intense smiles. "I knew you had a soul, Driver."

"Everyone has a soul. It's been proven scientifically..."

"That's not what I meant."

"Oh."

"Ranking Matthew, have you ever undergone the Delphic Testing Series?"

"Nay, of course not."

"Do you think you could be an overt precognitive?"

"Nay." Driver crossed his arms in front of himself.

"Don't be offended," Redfire told him. "Most humans have a latent precognitive ability. In ancient times, it was called 'Didja-View?' We see flashes of events that we don't recognize until the events are upon us. A few people have a more advanced state."

"Would you stop..."

"Don't be offended. If you have that ability... it's like carrying a little bit of God in your head."

Driver said nothing.

Redfire said, "May I ask you something else?"

"What?"

"I know your father moved to Midlothian after his discharge from one of the Rehabilitation Settlements. He wasn't there for very long, but I don't know what he did. Those records were sealed."

Driver was quiet for a moment. "How much do you know about me?"

"You are probably the best pilot and maybe the best officer in service to Republic." Redfire paused. "But, a father with a rehabilitation record would limit your career options at the Ministries of Space and Defense."

Driver found that the back of his head had started to ache. "My father worked for the Health Ministry Research and Development Laboratory in the City of Progress," he said. "He was in charge of testing a new medical device. He ... he says he misinterpreted some results and gave the device passing marks on some tests it shouldn't have passed. The device was released. It had a design flaw. Some people died as a result. My father was sent to the Rehabilitation Settlement. After three years, he was judged rehabilitated, but he could never go back to City of Progress. So, he moved to Midlothian with my mother."

"Are you trying to say your father went to prison because he said a product was safe and it wasn't?"

"His negligence led to several deaths. That is the law."

"He made a mistake. He didn't intend to harm anyone. With laws like that, it's amazing your planet every achieves anything."

In the dim pre-dawn light, Driver's eyes looked deeply into Redfire's and he quietly asked him never to tell anyone about his father. Giving no assurances, Redfire changed the subject. "While you and Roebuck were sleeping, I monitored vocal communications from such groups of Merids as I could detect throughout the city. They are not a talkative group of people, but I think I have enough to attempt communication. All I need now is a test subject. I'll need you to help me capture one so we can read his brain patterns."

"Capture a Merid and submit him to a brain scan against his will?" Driver said incredulously. "I don't recall reading that in any mission profile."

"I revised the mission profile."

"But the Merids already know our language."

"Tactically, we have to speak theirs." He stood. "Sensor interlink mode." He linked his Spex to Driver's display, scanning in infrared mode. "I am showing a lone Merid. He's in an alley about 450 meters from here. We can grab him without a low possibility of resistance."

"Right," Driver acknowledged.

"Should we wake him?" Redfire asked, jerking his head to Roebuck.

Driver shook his head. "I don't believe he would be much help."

"Let's go," Redfire said.

Redfire led him across the slanted, broken cityscape, darkness staring at them from the empty sockets of crumbling windows. Infrared figures danced at the margin of his vision, like ghosts haunting this tumbledown cemetery that pretended to be a city. They soon came to an alley. Redfire pointed with a glove-over-the-head gesture. They peered down the alley, literally down, as it descended gently with the

slope of the tower. They had two surprises.

The first was that the person in the alley was not like the Merids they had seen in the tower, it looked human, and female, as evidenced by what the one item of clothing she wore failed to conceal. The second surprise was the item of clothing itself – Halliburton's jacket.

Redfire flew down the alley and pinned the girl in a flash. She screamed, and Redfire cut it off with a hand to her mouth and a cut to her abdomen that knocked the wind out of her. She was such a small, slight of a thing, that Driver thought Redfire might have broken her back. He pinched the back of her neck, sending a paralyzing electric shock that rendered the girl unconscious.

Driver armed his pulse weapon but he didn't detect any unfriendlies in the area. Maybe Redfire had cut her scream off quickly enough, but Driver had a strange intuition that nobody cared.

The sensors remembered the course back to their base camp and gave them directions. Redfire carried the girl inside and lay her down. "That went smoothly. Stand guard."

Driver stood by the entrance, covering him. "Right."

Redfire examined Halliburton's jacket. It had been cut in several places, but he saw no bloodstains. He opened the medical kit and attached two small sensors to the girl's forehead.

Suddenly, the Meridian girl woke up and began screaming.

Roebuck leaped off the ground and flailed for his weapon. "Wh'appen! Wh'appen!"

Redfire grabbed the girls flailing arms and pinned them behind her back.

"What is she saying?" Roebuck shouted. "Krishna, you're scaring the slag out of her."

"Shut up," Redfire ordered. He pinched her face in his hand and forced the girl to meet his eyes. He held her face still, trying not to recoil against her rotten stinking breath. He had to connect to her mind. He focused his thoughts on conveying to her that she was not in physical danger and that he would release her when his questions had been answered.

Her screaming diminished, but Redfire did not know if he had succeeded in reaching the girl, or if she had merely run out of breath. She blatted something, and the Lingotron translated, feeding its interpretation directly into Redfire's ear. "Eme... no ... no hurt... gr'rg."

"It's beginning to get something," Redfire reported. He pulled up a corner of the jacket. "Where... did ... you ... get ... this ..."

Her eyes were still wide open in terror, but no longer uncomprehending. He repeated the question, concentrating hard.

Understanding registered. She answered him. "Veen mok sha."

Redfire's eyes, already wide with the adrenaline of the moment, washed over with horror.

"What did she say?" Roebuck asked.

"She said 'meat market.'" Redfire answered tonelessly.

Roebuck gasped. He shook his head. None of his usual expressions of disgust and horror, and no combination that occurred to him at the moment, expressed his feelings better than simple blank minded, open-mouthed horror.

"How did you get this jacket?" Redfire persisted.

She smiled. Although young, her teeth were hideous; so twisted and rotting that the spots where they were missing were the most appealing areas of her mouth. She answered in the Meridian tongue and parted her jacket and thrust up her hips, displaying that part of the anatomy the madonnas back in Halifax called their "cashbox."

"What?"

"The translation is pretty weak, but I have the impression she traded something for it and she is offering to trade us the same thing if we let her go."

Roebuck averted his eyes. "Fragging no thank you."

Driver called from the front of the alley. "Tyro Commander Redfire, we have a situation."

Redfire turned from the girl. "Watch her, Eddie," he said. He stood up, passed Roebuck and moved toward the mouth of the alley.

"What's up, Matthew," Redfire said, seeming tired for the first time in the long mission, but Driver didn't have to answer, Redfire could see for himself.

There were about a score of people closing on the alleyway; humans armed with clubs, pipes, and a few nasty Merid plasma guns. They heard a clicking noise behind them and looked up to see more people, surrounding them, training down on them with weapons from the top of the ruined wall.

chapter fifteen

Meridian – The Upper Levels of the Arcology

The Interfaces' questioning continued relentlessly, most of it concerning the particulars of inter-stellar spaceflight – means of propulsion, hyperspatial navigation – interspersed with practical questions on the technological infrastructure of Sapphire and Republic; seemingly esoteric inquiries about the degree of integration between culture, environment, and technology on each world; and some questions that were downright non-sequiturs, such as whether the number of sexes in their societies was fixed or constant.

These were punctuated by direct challenges: "The ship that brought you is but one of many, contained within a larger ship that is now, approaching this planet. Is this data accurate?"

After many hours of articulating technically accurate responses that answered the Regulators' questions while providing no real information – a family gift that had well-served generations of Lear politicians – Tyro Commander Lear was finding it difficult to maintain the focus of her thoughts, and this had never happened to her before. "Affirmative," she answered.

"Will you order your people to turn over the larger ship to the Regulators?" the interface asked, as though asking for a glass of water.

Lear was taken aback. "Why?"

"The Regulators require it."

"I do not have the authority," Lear said, "I have to answer to another whose rank is superior to mine, and he will be unwilling to surrender the ship."

"He would resist us?"

"He will resist you at every turn."

"Will you kill him and turn the ship over to us?"

Not much for diplomacy, these Regulators thought Lear. "I would..." she answered, and if she had looked at Partridge and Taurus in that moment, she would have seen their jaws drop open. "... if I thought that it were necessary."

There was a pause and then that uncomfortable ruffling noise again. "Explain."

Lear stood, wearing a pleasant yet inscrutable expression with which she meant to convey inner self-assurance, but that unnerved Taurus and Partridge greatly.

"If I understand properly, the Regulators propose to use our ship to travel to other human colonies, taking over the central cybernetic intelligence systems of each world; a good and worthy plan, and noble of the Regulators to share the system that has brought lives of comfort and security to your people. However, it isn't necessary, or even efficient, to use ships to transport information through space. If the Regulators would permit, I believe I can present a better plan."

Lear moved before the assembly. Generation upon generation of Lears had served Republic in the Parliament, Assembly, Diet, Legislature, and Council; recent generations had gravitated toward the ministries, where there was less speech-making but more real power, but she trusted her heritage to carry her through.

"My people live on two worlds, divided by fifteen light days of space. We were abandoned, like your world. For many hundreds of years, we had no contact at all. Our worlds were divided, and we each had our own concerns to attend. My world needed to unify, much like yours. In the fullness of time, the necessity for communication with others of our kind arose again. It is why we built our ships to explore

and reconquer this lost empire...”

Lear’s introductory comments went on for about half an hour. Jersey Partridge had attended countless sessions of Sapphire’s Governing Body, the ‘Thing,’ which met in the beautiful and spare Building of Governance in Corvallis. He remembered when he was eleven years old and had watched as the Chief Delegate from Hootch Grabr threatened the Chief Delegate from Nether Graceland that he would rip off his arm and beat him to death with it if he didn’t support a reauthorization of the Public Civility Act.

No Partridge had ever been chosen to serve in the Thing, but they perhaps held more influence than even the Supremes*. The Partridge family had built its fortune on the sole disadvantage of the Sapphirean system. No one was allowed to work in government for more than ten years, from Chief Supreme to lowly clerk. The randomocracy eliminated politics by preventing anyone from gaining or holding power for very long. This worked extremely well at eliminating the inertia, greed, power-mongering, privilege, arrogance, indifference, megalomania, corruption and so on that had plagued every other system of government humanity had ever devised. (Most systems, like Republic’s, sought only to manage those evils, only Lexington Keeler’s randomocracy had eliminated them.) Unfortunately, it also meant that each time the government was changed over, any wisdom and experience from the previous regime was also lost. Most agreed, this was a fair exchange.

Gilvaney Partridge and Sreenidhi Megawatt were not the first to hit on the idea that a consulting firm to advise each new crop of Delegates and adminicrats that came into Corvallis would be highly lucrative, but theirs was by far the most successful. Each new Thing would almost always allocate a part of the world budget for consulting fees. Crumbs by even the modest standards of Sapphirean government, but enough to afford the Partridges and the Megawatts lives of singular comfort and privilege.

Because of his upbringing, Partridge thought he had a grasp of the system on this planet. perhaps a better one than Lear. He had the idea that the Interfaces neither knew nor cared what the agenda of the Regulators was, so long as they kept their positions of authority over the rest of the population. What he had a tough time figuring out was how the rest of the population put up with it.

The Merids stared back at him, hundreds of dark, anthracite eyes set in identical pale and ovoid faces. So little variation among them, they might have been clones. He wondered if they were. Genetic manipulation might produce a population that was easier to control.

Discreetly, he loosened the latch on a side compartment of his medical kit and, observing that not a single pair of eyes was trained his way, carefully withdrew a few small glass cylinders.

After an extended prologue, Lear came to the meat of her speech. “Ships are built to carry people, and equipment, but the Regulators exist as raw data.... energy and data. They can be transmitted.”

The Interface interrupted. “I am instructed to inform you that this type of transmission is unacceptable. The data form of the Regulators is voluminous and complex. It requires precise reconstruction in the receptor system. Transmission inevitably entails data loss. As the distance of transmission increases, data loss increases exponentially. Any data loss is unacceptable.”

Lear nodded. “You are correct. Conventional electromagentic signals degrade across distance. However, Republic and Sapphire have recovered an ancient technology that permits instantaneous communication across any distance, with zero data loss.”

She looked to the interfaces for signs of interest. They betrayed nothing. She spoke on. “The ancients used a technology known as tachyon-pulse communication. Tachyon is the generic term for any naturally occurring energy or particle that moves faster than light. Certain tachyons move at infinite speed, meaning they pass through every point in space simultaneously. Using this breed of tachyons, instantaneous communication is possible across any distance in space. Infinite speed tachyon transmissions have zero data loss because no force in the universe can interfere with them.”

There was a long silence. Lear heard the rustling noise again. *It is the Voice of the Regulators.* Something told her. Something else mixed in, like a scream of agony.

At last the interfaces turned and answered her. “The theory is sound, if the existence of tachyons can

be proven and if the Regulator's intelligence matrix can be encoded into tachyon. If so, could you enable us to construct such a device?"

"Such a device is possible using your existing technology."

The Interface spoke again. "Even if it is possible, is the use of this technology not limited to worlds that possess the capacity to receive the signal? The Regulators demand to know if you know of any worlds besides yours that possess this ... tachyon pulse technology?"

"Unfortunately, I do not. However, imagine if you will, the intelligence of the Regulators transported to Republic. Each of our cities is run by a central intelligence, our version of your Regulators. Our world possesses the technology to build ships that travel among stars. With the Regulators in control of our world, you could build thousands of ships, and bring order to all worlds."

The interfaces leaned forward into their consoles and seemed to silently debate for a long several minutes, before declaring, "The Regulators demand that you demonstrate the existence of these tachyons of which you speak."

"I require your largest and most advanced laboratory, unrestricted data access, and a team of your best scientists and technicians."

"Scientists and technicians?" the interfaces conferred. "We have a large number of inhabitants programmed to perform as technicians, but we have no need for scientists."

"We should be able to manage without them. I will require equipment from the ship that brought us here. Will you permit these two access to it?"

"Stand by, we are receiving additional input."

The screen came back on, showing the perimeter of Meridian enforcers guarding *Prudence*. "Your ship has activated some kind of autonomous defensive system. No one is able to approach."

"Specialist Taurus knows the disarming codes. She will be able to approach the ship and recover the equipment that I need." She knew this would come as news to Taurus, but the Warfighter kept her tongue.

"The Regulators agree." Merids in shock-troop armor began to spill, somewhat listlessly, into the room. They quickly surrounded Partridge and Taurus.

Lear raised her hand firmly. "Will you guarantee the safety of these people?"

"The Regulators absolutely guarantee their safety."

Lear smiled, "It's all right. Go with them."

Partridge broke away from the guard and tried to break toward Lear. He reached for her, but was held back. "Tyro Commander Lear, are you really going to help them?"

Lear smiled. "We are going to help these people, as the *Odysse* charter requires us to do. They are different, but who is to say that their way is not better?"

"...but, you saw..."

"Specialist, I order you to go with them back to the ship. Get our landing packs and bring them back, also as much scientific equipment as you can carry."

Partridge backed down, and slowly returned to Taurus, surrounded by a group of diminutive, armored Merids. The interfaces barked a command to the enforcers. They turned and marched out with their prisoners. An interface came toward Lear. "I have been instructed to take you to a facility we have prepared for your use."

"I am honored by the trust you have placed in me."

"The Regulators believe you only because examination of the human specimen you provided enabled them to determine that you were telling the truth."

Taurus and Partridge were led down the long hallway that earlier had brought them to the Council Chamber. As they rounded a corner, Partridge stumbled, spilling several small, clear glass cylinders from his medical kit. "I'm sorry, I must be tired, it's making me clumsy, would you help me..."

The enforcers looked at him dumbly. Only when he leaned over and began reaching did they begin to

follow suit. They grabbed the small tubes in tightly closed fists, exactly as Partridge had hoped. He quickly stuffed them back into his pack. "Thank you so much."

Without so much as a grunt of understanding, the enforcers continued down the corridor. The construction was shoddy, even on this level. Many of the wall panels and lighting elements were installed poorly, mismatched to the others. Ventilation shafts jutted out from the walls, loose wiring hung in places. Neither on his world nor on Republic had he ever seen such shabbiness. On Sapphire, no one would pay for such shoddy work. On Republic, non-spec workmanship got you sent for retraining.✱

They passed through a gateway and their guards were changed. The hand-off was accomplished wordlessly, and they were taken down yet another corridor. Partridge was wondering if the Meridians were going to offer them food at some point. He hadn't eaten in hours. He wondered what Merids ate.

They approached the transporter station where they had earlier been deposited on this level. One of the enforcers who escorted them exchanged words with the enforcer who stood sentry at the transport station. The words were in Meridian, but Partridge had a sense that something was amiss. He thought he was used to being terrified and was surprised to find he still had capacity to be even more scared.

After a few exchanges, their escort unholstered his plasma gun and fired a shot into the sentry, then turned and killed the other enforcer with another shot. He fired two shots to blow apart the doors to the transport station and jerked Taurus and Partridge inside. There was no transporter car waiting beyond, just a long dark shaft from which issued a damp, cold, and monstrous breeze.

The whole action could not have taken more than a few mere seconds, but the escort lifted a small black pad to Taurus's neck that issued an electric crackle and knocked her unconscious. The escort caught her collapsing form in his arms and heaved her into the abyss.

Partridge was so shocked by this that he made no effort to resist when the escort did the same thing to him.

chapter sixteen

Pegasus

Pegasus drifted in space. Her light diminished, the ship appeared not as a single dazzling double-diamond of light, but as a small constellation of dim stars.

Keeler stayed in the BrainCore sections long enough to confirm what Queequeg had posited. The BrainCore and the auxiliary BrainCore were empty. Caliph was gone, and so was the old man.

He took his travel pod back to the bridge. He would have preferred — in fact, he wanted nothing more than — to sit in his quarters and drink gin and tonic after gin and tonic until the throbbing pain in his head subdued under a thick blanket of alcoholic stupor, but he knew he had no such entitlement. He was in command of this fiasco and he had to go to the bridge and take it like a man.

He considered that he ought to turn his command over to Executive Tyro Commander Lear. In light of the situation, she would probably demand it, anyway. Maybe he would retire to his quarters, become the ship's historian, spend his days honoring those millions he had killed by drinking toasts to their memories, one at a time.

When he reached primary command, Chief Engineering Lieutenant Ojala, a muscular man with mahogany skin, a bald head, and stony black eyes, reported progress in linking the communications arrays and sensors on the Aves as a substitute for *Pegasus's* disabled systems. Keeler was glad he had brilliant people on board like Ojala.

"The non-centralized systems, environmental controls, weapons systems, communications and so forth, can be re-loaded into the BrainCore." Ojala had explained, in his throaty basso profundo. "I've got teams working on each, we *will* make this happen."

"What about the more complex systems? What about Navigation?"

"We keep back-ups of all major systems in secure storage. We can reload navigation and engineering systems easily enough, but then we have to integrate them, and get *Pegasus* back to functioning as an organism again."

"How long?"

"The process took three years the first time around, but I think we'll be able to pull it together faster this time."

"How long?"

"*Pegasus* is an extremely complex organism."

"How long?" he said, raising the volume for clarity.

Ojala shrugged. "Eight months?"

Keeler felt as though he had just received a long slow kick to the stomach, like his back was about to break, from the shoulders down. "Eight months before we can leave this system. Eight months of orbiting the charred remains of the civilization we destroyed."

"We don't have to be in orbit, Sir."

"Oh, za, we would," he slammed his walking stick against the deck. "Every day for eight months, we could look out of our viewports and see what we did, out of our stupidity and our arrogance. Think of it as an object-lesson." He stopped there. "I'm sorry, it was not your decision. Go to, good engineer. Make my ship work again."

Alkema was again standing on the observation deck with his astrolabe. He made some final observations and returned to the Inner Bridge. "I think I have good news."

"The ship isn't on fire?"

"Neg, sir. We're on course for the planet."

Keeler scowled. How could this be? Without the gravity engines to provide velocity in the opposite

direction, *Pegasus* should have just continued drifting on her original heading. "How? When we knocked out the engines, we were headed away from the system."

"Caliph must have turned the ship around, probably about the time she fired the missiles, while we were distracted and blind."

"How?"

Alkema thought the problem over. "Maneuvering thrusters maybe ... or maybe the sails...."

"The sails can only deploy in hyperspace."

"Neg, they're designed to work in hyperspace, but the sails are basically just energy. We don't use them in normal space because the gravity engines are faster and not dependent on the solar wind, but she could have deployed them, tacked to the wind..." he paused. "Or, she might just know a few tricks we haven't figured out."

"Have known," Keeler corrected. "Caliph is gone."

Keeler turned to the Kayliegh Driver, who hadn't left and was presently sitting in for the Communication Officer. "Could you summon Lt. Navigator Change to the bridge?"

Driver nodded curtly and began linking to Navigator Change's quarters, where she had gone to rest two hours earlier, leaving American in charge.

Alkema sent a test signal along the ship's lateral deflection array and read that it was 45% restored. "At least by the time we get to the planet, we should have most of the systems restored."

Keeler sighed. "All this wondrous technology crippled by the absence of an intelligent mind. Marvel at the contrast between this beautiful ship, and the burned out husk of a world we will leave behind. It was never meant to be like this."

Alkema shrugged "We can't go back to Sapphire."

For a moment, the idea was a bright flash of hope. Za! Go back to Sapphire, to the estate on New Cleveland. Of course, eight years had passed on the planet, and it would be another eight before they got back, but on the plus side, those freshling girls who had been too young for him before would be fair game now. What would they say about him at the Lake of the Loons Country club? *"See that fellow, Bill Keeler, killed a billion people, some say."*

"I guess not," Keeler sighed.

Alkema turned away from his panel. "This is not your fault, sir."

"Isn't it?"

"You told us not to leave the system until we had isolated the glitches. If we had stayed, we might have recognized ..."

"Za, but I didn't stop the mission."

"Sir..."

"Leave it alone." The last thing Keeler needed was this whelp making excuses for him.

Lt. Navigator Change regained the bridge. Her uniform was crisp, her hair neat, and she bore no indication that she had been awakened from a sound sleep. "What is it, Sir?"

"Specialist Alkema tells me that we have somehow reversed course and are now headed for the inner system."

"Are the engines back on line?"

"Neg, we think Caliph altered our course before the missiles were launched. We're not sure how. I thought you might have some insight."

"We think she might have used the inter-dimensional sails," Alkema added.

Eliza looked slightly puzzled. She sat down at her navigation station. "That would have been unnecessarily complicated."

"How do you mean?"

"Sails are efficient if you're moving away from a star, but not if you're moving toward one. It would have been faster to use a gravitational slingshot using the natural gravity of a planet or asteroid to alter the ship's trajectory."

"Is that possible with a ship this size?" Keeler asked.

"In the guild, we used to slingshot the big ore processors all the time. All you need is a good-sized planetary body."

"Or just a planet with big bones," Keeler muttered.

Alkema leaned over the NavStation. "Could we use that same technique to pick up extra speed as we inbound toward Meridian?"

Change was thoughtful for a second. "It's possible, are there any planets or moons on our present course?"

Alkema called up a display, which showed the Meridian system and the position of *Pegasus*. "Za, there are three planets and fourteen moons within fifteen degrees of our current heading."

"There's a piece of luck," Keeler said, *finally*.

Eliza studied the display intently, holding her chin in her hand. "I can do this. I'll plot three gravitational assists. That should effectively double our speed to the inner system. I will need control over the maneuvering thrusters for any unanticipated corrections."

"Unanticipated... you mean you can't just plot this all out?"

"I can. It's quite simple. The Astrogation and Cartography Survey has mapped out the masses, composition, and motion of those worlds. We know the mass of the ship and we can calculate our speed. The basic mathematical equations are relatively straightforward. However, our data sets are not complete. Variations in the surface topography of the planets, changes in motion from objects we haven't plotted may require us to alter course."

"Is there any danger?" the commander asked.

"We can minimize the danger," Change told him. "Bring it to an acceptable level."

Keeler frowned. "...but we can't eliminate it?"

"People who want complete safety don't belong in space."

"Za, but neither do people who would smash this ship across the surface of an alien moon."

Eliza was steady, but firm. "You asked for a solution, I gave you one. If you want a miracle, you've gone to the wrong person. I'm a navigator, not a priest."

Technically, I didn't ask for a solution, Keeler thought. He turned to Alkema, who was looking at him expectantly. "O.K., let's do it. Make your calculations and lay in a course. Would you like an and/oroid to assist with the calculations?" Change shot the Prime Commander a cross look, fiercely offended. "Or not," Keeler added.

Kayliegh Driver, mercifully, called for his attention. "Sir, Flight Core reports launch systems are back on-line."

Did Keeler dare believe things were turning around? "Do we have any ships ready for launch?"

"Three Aves standing by for launch on your command."

Keeler leaned into his command station. "Launch the Aves as soon as possible. They'll serve as our eyes and ears until our sensors and comm. systems are back up. They can escort us in to the inner system."

Driver laid a hand on a transceiver pad. "Aves *Winnie*, cleared for immediate launch. Railgun status enabled. *Yorick* and *Zilla* stand by."

A monitor showed the first Aves emerging from the front of the ship and streaking into space. "I see your improvised communications network is functioning effectively, Specialist Alkema."

Alkema leaned over a flight operations workstation. "Let me see how well I can receive telemetry on the Aves after launch."

He got his answer a few minutes later. He proudly displayed the holographic image of three Aves holding position, two above and forward, one below and aft. The aftmost Aves was the key, as it linked telemetry and communications to an Aves parked in the hangar bays, which in turn linked the data to Primary Command.

"Relays in place, receiving telemetry," he double-checked the read-outs and scowled. "Here's a

strange."

"What?" Keeler asked.

"Some kind of signal being beamed over *Pegasus*, enveloping the whole ship."

"A kind of cybernetic intelligence trying to take over our BrainCore?" Keeler asked.

"Way beyond where I live, commander. I've never seen anything like it... of course, it's not my area of expertise. I'll send it through Technical Core for analysis."

"Can it affect the Aves?"

Alkema shrugged. "It doesn't seem to be."

Keeler thought. "Is it coming from Meridian?"

"I'll try to find its source... Hold on a minute. Keeler watched as Alkema measured the strength of the signal around the ships. "This could take a while."

Keeler nodded, fidgeted slightly.

Kayliegh Driver called out, "Sir, *Yorick* is picking up another signal."

"The same signal that's enveloping the ship?"

"Neg, they think it's from the landing party."

"Put it on."

"Relaying now."

"This is Tactical Tyro Commander Philip John Miller Redfire of the Alliance Pathfinder Ship *Pegasus*, transmitting from the Excursion Vehicle *Prudence* on the surface of the planet Meridian..."

The remainder of the transmission was as Flight Captain Jordan had heard earlier. "Message ends." Driver reported. "There's also Mission Logs from *Prudence*."

Keeler asked to review them. They saw everything recorded from descent to the point Redfire, Driver, and Roebuck left the ship.

"What do you make of it?" Alkema asked when it was over.

Keeler looked thoughtful "Tyro Commander Redfire's report corroborates what Caliph was trying to tell us about the planet and its inhabitants. Redfire speculates about a totalitarian regime hungering for new technology. They don't have space travel, but they do have artificial intelligence, and they may be capable of using some kind of aggressive cybernetic virus to take over our ship."

"What's a totalitarian regime?" Alkema asked.

Keeler crossed his arms, and straightened, to better lecture the bridge. "A totalitarian regime is one in which it is the duty of everyone and everything to serve the state."

Alkema scowled. "Why would people want to do that?"

"They don't, the totalitarian state is maintained by the exercise of force and violence. Such states have arisen throughout human history and have been the cause of most of our major wars, since their aggression inevitably turns outward as well as inward."

"The Second Global War of ancient Earth, for example, came about when a totalitarian government arose in a powerful ancient state called Germany fell under the leadership of a totalitarian cult known as the Nasties. The Nasties conquered many of the nations of the world and were only stopped by the use of the first nuclear fission weapons, which were developed by the Japanese Empire and used by a country called America."

Alkema shook his head, it sounded insane. He checked his sensor analysis. "I've isolated the source of the signal. Directed electro-magnetic-wavestreams; like a spotlight shining right on the ship. This is strange, its profile and signature are actually pretty close to the natural magnetic field of a planet, almost like it's natural in origin."

Perhaps Caliph had been right. *Neg*, Keeler forced himself to admit, she *had* been right. He took no comfort in that revelation. It only meant that when they did reach the planet, they might find themselves

in the thrall of something even more dangerous and overpowering than the entity they had banished from their ship.

chapter seventeen

Meridian — Outside the Arco-Tower

Partridge opened his eyes and saw the blurry form of a Merid leaning over him and a very bright light in the background. He closed his eyes again, hoping it would go away.

"Partridge, wake up!" a voice hissed.

He slowly opened his eyes again. His vision cleared, and he saw that the light was the sun, strained through a gauzy layer of pea-green clouds, and the Merid was Tyro Commander Redfire in smelly, poorly fitted armor. Partridge sighed, "Oh, by God, you're alive."

He then recalled his last memory before unconsciousness. "By God, *I'm* alive."

Redfire stuck out his hand and helped him up. "Welcome to the Bush of Whispering Ghosts. Some Shadow-men helped us rescue you from the Regulators... in accordance with prophecy."

Partridge contemplated this for a moment then said, "What?"

"I'll explain it to you more when you've recovered a little bit. We understand the circumstances of your rescue were rather strenuous."

"Rescue? Is Taurus all right?"

"Dislocated her arm, twisted her knee, you may want to have a look at her. We had to make sure you were unconscious when you fell down the shaft. If you were tense or flailed on the way down, you might have been seriously injured when you hit the paranets."

"Paranets?"

"From the landing packs. We stretched paranets across the shaft near where we broke out of the tower. They absorbed enough energy to keep you from bouncing. Flight Lt. Driver calculated the tension. He's very precise."

"If we had landed on our necks, we could have died"

"The alternative was letting the Merids have you. After what they did to Halliburton, we decided that might be worse."

"What did they do to Halliburton?"

"They tortured him for several hours, then sliced him up for meat.... we think anyway, we can not be sure, but it seems likely."

Jersey Partridge felt like he was going to lose consciousness again. Redfire grabbed him by the shoulders and shook vigorously. "Stay with me, Partridge."

Partridge kept himself from passing out by breathing fast and hard. He raised his eyes. They were very high up, on some kind of half-ruined battlement that encircled the tower like a collar, about 400 meters below the summit. "Are you hungry?" Redfire asked. The tactical officer seemed to be in uncommonly good spirits.

"I am starving," Partridge complained.

"You have a choice, my friend." Redfire held out a silvery packet and a steaming black bowl. "You can have the bland contents of this landing kit survival pack, or this bowl of a local Meridian delicacy."

Partridge took the delicacy because he felt like he needed something hot. It turned out to be some kind of noodles. He began digging in with the spork Redfire provided him.

"What's Taurus's condition?" Partridge asked.

"I popped her arm back into position and gave her a sedative, some pain suppressers, and a healing accelerator. She'll be fine."

"So, how did you rescue us from the Meridians?"

"There are ... what shall we call them, subversive agents within Merid Society. They're called 'Shadow-men.' They belong to a kind of resistance movement that has been fighting the Regulators for thousands of years, and losing. They rescued you."

The noodles had a gamy flavor, with a light satisfying crunch. "How did you find out about them?"

"After leaving the tower, we captured a Merid so we could analyze her brainwaves and figure out the language, and were quite surprised to find that she was human... mostly human anyway. Meanwhile, our camp got surrounded by hostiles. How is the food?"

"This isn't bad. What is it? Some kind of noodles?"

Redfire reached into the bowl and lifted a single noodle to the light, and Partridge saw that at one end were three tiny closed eyes, and a triple set of jaws with tiny little teeth. "Baby Meridian eelworms," Redfire explained. "Anyway, we presume they're Meridian. Our ancestors moved a lot of stuff from world to world as they went around the galaxy."

"Did you eat this?"

"Far be it for me to pass judgment on local cuisine. I'm an artist, not a critic."

"What about Driver and Roebuck?"

"They were concerned how their bodies would respond to the alien proteins. If you're still conscious in eight hours, they might try some."

Partridge reached for his medical pack, and thanked God when he found it still strapped to his person.

"Anyway," Redfire went on. "We were facing off against about, two score Merids, armed with a variety of weapons, pacing us, like the stalking cats of the Jutland Savannah, preparing to strike, even had a slight yellow glow to their eyes. I told Driver and Roebuck to set their pulse cannons for a burrowing charge, full yield. I was going to blow the floor out from under them."

"Suddenly, we hear these shots... plasma weapons. A couple of Merids go down. The rest of them scatter. We thought we were about to be captured, but then this other group of people in black robes and hoods came forward. This man steps out in front of the crowd with his arms raised, speaking in a dialect the lingotron recognized. He introduced himself as Shouts-Loudly-Against-Oppression, the leader of the Witnesses."

"I thought you said they were called 'Shadow-men.'"

"Neg, the Shadow-men are like secret agents who work inside the towers. The Witnesses are peaceful, their main purpose is to preserve the memory of life before the Regulators."

"What about the ones who were going to attack you?"

"Those were what the Witnesses call 'throwbacks.' They aren't really human... more like ... unacceptable genetic mutations that have been exiled from the city, hence the name. They live in the ruins around the tower, surviving on whatever the Merids throw out. They are savage and primitive... you don't want to be with them."

Partridge nodded. "The Merids told us about the Throwbacks. They also said that they were the colonists, the Merids inside the tower, that they had evolved."

"That's partially true."

"Then, they're not aliens."

"Actually, they are aliens... sort of... in a way. The explanation gets rather difficult and bizarre from this point."

"Difficult and bizarre?"

"Difficult in the sense that the Merids are not really aliens, but they're not really human either. Bizarre in the sense that the Witnesses have been expecting us. Our coming had been prophesied for centuries. If the prophecy holds, we have a lot of work to do."

"What kind of work?"

"I'll put it this way, have you ever fantasized about leading a desperate people in a revolution against an evil and oppressive government? I know I have." Redfire began to grin so hard it looked like his cheeks

were about to be pushed into his earlobes. "I have to keep pinching myself just to know I'm not dreaming."

Meridian — Inside the Arco-Tower

The laboratory the Merids supplied Tyro Commander Lear was the best on all of Meridian, which put it only a few centuries behind the average primary school on Republic. Nevertheless, it was adequate to the task ahead. The Meridians had also supplied her with a cadre of their best interfaces. The interfaces followed her work intensely, it being their job to explain her designs to the Regulators.

"... therefore, the translation into TPT language is straightforward," Lear finished.

The interfaces acknowledged. "The process of translating the Regulator protocols into TPT language has begun. We estimate completion in 2.7 hours."

"I must say, I greatly admire the efficiency with which your world operates," Lear told the interfaces.

"We are nothing without the Regulators' guidance."

"Would you have the Regulators review this preliminary schematic," she brought up a representation on the primitive, two-dimensional, solid-state, plasma screen. Scanning beams shot out from the eyes of the interfaces.

When they finished, the interfaces reported. "The Regulators will assign facilitators to its construction at once."

"I believe the internal structure of the tower can be used as a signal amplifier, but the flow of energy throughout the tower will have to be adjusted. These calculations will enable you to direct those changes."

"The Regulators will study and implement the changes."

She smiled. So efficient. "Have my compatriots returned?"

"The Regulators instruct me to tell you that your companions have been terminated. Do you still require access to your ship?"

Lear knew she should be disturbed by this news, but for some reason it failed to register as anything other than information. For that matter, she felt the need for neither food nor rest. Curious, that. "I believe the material available in this laboratory will be sufficient."

"The Regulators wish to know how long construction of this device will take."

"I think you will be pleasantly surprised."

"The Regulators request specific data."

"If all goes optimally, we can begin tests before the end of the day. If the tests go well, I see no reason why we should not be able to transmit tomorrow."

Meridian — Outside the Arco-Tower

When Partridge could eat no more, which wasn't long, Redfire led him to another part of the camp, where Roebuck, and Taurus sat in the midst of a group of people in black and gray clothing of a kind of robe-and-tunic construction; the Witnesses. Driver stood off to the side, staring out over the city from the edge of the battlement.

An old man was addressing them as he sat on a ruined parapet. He was dressed in a kind of black jumpsuit, not unlike what the Merid troopers had worn under their armor. It was immaculately clean, if threadbare in places. He was large and strong-looking, on the front end of old age. What that meant in local years was anyone's guess, but he had at least a pair of decades on Prime Commander Keeler. His hair was covered beneath his hood, but his beard was gray as stone. His language struck Partridge's ear like a too-rapid rendition of the chanting he had once heard in an Arcadian monastery. The monks, through centuries of repetition and passage of an oral tradition, had preserved some of the ancient language of Earth from which all the dialects of Sapphire were descended. Hearing the old man speak, Partridge

realized that these people, were speaking a variant of that same ancient Earth language.

Redfire linked into Partridge's translation module. "The Lingotron has worked up a pretty good translation of the local tongue. It still sounds a little off, but you get used to it."

A small voice in Partridge's ear translated as Shouts-Loudly-Against-Oppression spoke. "You thieved armor from the enforcers. Did you make physical examination of the bodies?"

"Neg, the smell was bad enough *outside* the uniforms," Roebuck answered. He was getting on quite well with the Witnesses since discovering they had women, drink, and non-eelworm-based food.

"You possibly then are interested to know that they possessed no reproductive organs," Shouts said without a smile.

"No slag!" Roebuck said.

"No, the excretory systems are being fully intact. The Regulators eliminate sexual distinctions. They seek to combine the physical strength of the male with the emotional temperament of the female."

"My cousin Kiko is the same way," said Roebuck.

"How do they reproduce?" Partridge asked.

"Females of small number are allocated to develop normally. They are lobotomized shortly after birth, then sustained until eggs can be harvested from their ovaries. The eggs are fertilized with genetic materials from existing stocks."

Roebuck shuddered. "This is, without a doubt, the nastiest planet I have ever been on, including Republic."

Partridge examined Taurus's arm while she rested in the embrace of her sedative. She, Driver, and Roebuck appeared to be fine, and despite a certain psychosomatic squirming he felt in his stomach, Partridge was beginning to recover some of his native optimism.

The old man approached Partridge. "It is thankful that you were recovered from the custody of the Regulators."

Redfire handled the introductions. "Shouts, this is Medical Specialist Jersey Partridge."

"Well-met Medical Specialist Jersey Partridge," the old man sat down with Taurus and Partridge, and repeated the history he had earlier shared with Redfire, Roebuck, and Driver.

"When our world was banished from the rest of humanity, there were scarcely 80,000 souls on this planet. Our water was undrinkable minus processing. Crop failures were 90%. After the Earth ships stopped coming, drastic measures were necessitated... or else..."

"...or else when we got here," Redfire cut in. "Your planet would have been a very quiet place."

The old man grunted. "Within a century of the abandoning, our machines began breaking down... the water processors, the weather modulators, the artifactories, the... the things we lost the names for...all failing. No one knew how to repair them. Or, those who did know, were in cities thousands of kilometers away with no way of getting where they were needed."

Partridge broke in. "That is similar to what the Regulators told us. They said the Regulators had to invent cybernetic systems to regulate crops and so forth on the planet."

Shouts smoldered with anger. "The Regulators propound a false and self-serving version of history. Ours is the true history of the planet, passed by oral tradition."

Seeing his anger, Partridge resolved to keep himself quiet. The old man continued. "According to our history, the solution did not come from the leaders of our planet. It was farmers using a computer network to share information on crops and weather linked to a powerful central computer at the Agriculture Division. Agriculture Division disseminated information throughout the planet; which crops to plant, best techniques for making crops grow.

"Witnessing their success, other Divisions... Communications, Transport, Industry, Commerce, Housing... initiated the same protocol. It brought us back from the brink of oblivion. Eventually, all protocols combined together into Integrated Planetary Management System. IPMS. IPMS distributed resources, determined taxation levels, decided where to build energy stations. The role of our Governing Council soon diminished to carrying out the directives of the IPMS. For hundreds of years, that's the way this world was run."

"Is that how you all ended up living in these arcologies?" Partridge asked.

Shouts shook his head. "No, no. At first, IPMS liberated us to live and behave as we chose. In time, though, we became dependent. We no longer made our own decisions, but trusted the IPMS. Complete stagnation was the result. Once the IPMS achieved social, economic, and environmental equilibrium, no further advancement was allowed. Designers of the system had never calculated beyond a certain level of sustenance. Once all had enough, but no more, no alteration to the system could be made.

"In the time before before the Dark Angel fell on our world, there was a secret society. Some say it was part of the Council, some say it was an ancient order dating to colonial times, called the Shadow-men. You see, the Council had suppressed our planet's colonial history, or speculation about other human colonies. The position of authority was that there lived no humans on other worlds, and if there had been, they were gone and never coming back. Only the Shadow-men were entrusted with guarding the knowledge of other worlds. They watched the skies, and listened for signals. Their ways were secretive. They did not even acknowledge their own existence."

Shouts gestured to the sky and intoned melodramatically. "One day, as it was, as I stand here, one thousand two-hundred and twenty-six years ago, a Dark Angel fell from the sky."

"Excuse me?" Partridge said. "A 'Dark Angel.'"

"This is where it gets weird," Redfire said. "So, pay attention."

The Old Man spoke with almost operatic solemnity. "On the night I am telling, skies lit up with a fireball that left a twisting, glowing trail in its wake. It impacted in a distant province of New Acona. It was prohibitively remote, but the Shadow-men were there within a day.

"The first reports described a great black machine, twisted and burning, that had fallen from the sky in a crazy spiral. The Governing Council retracted the report, and said it was a large meteor. Pictures were shown of a large, burned rock and a crater. Most accepted the story. There were a few, however, who did not believe, and sought the truth. These became the first Witnesses. They told stories, incredible stories, stories too incredible to believe, too easy to deny.

"According to the first Witnesses, what had fallen on New Acona was a machine... possibly a ship. The truth of it hidden under the code of a secret operation named 'Dark Angel.' It was transported, in secrecy, to a complex in another remote area of the planet.

"At first it was thought nothing was inside. This was because what was inside could not be detected by their instruments. However, there was a thing living inside the machine. It was part of the machine, part alive and part machine and part something that wasn't alive or machine. It was the 'Dark Angel' invisible and cold. It needed to live inside a machine, and it needed to control."

"Control what?" Partridge asked.

Shouts answered nearly in a whisper. "Everything."

"Very soon, the Dark Angel found IPMS. The Witnesses tried to stop it, but they could not. Then, they tried to contain it. They went to every city, trying to destroy the central computer networks with bombs and vandalism. They slowed the Dark Angel's advance, but couldn't stop it. Once the 'Dark Angel' controlled the IPMS, it controlled our world.

"The Dark Angel divided and became many, and called itself 'the Regulators.' The Regulators began a program of concentrating all the people in the cities, where they would be easiest to control. They used persuasion at first, then coercion, and finally force. Enforcers moved into the countryside to drive the people out of their homes and into the cities. The smaller cities, the towns, the villages, the settlements were all burned and destroyed so completely that where they had been there was nothing but scorched ground.

"Finally, the last of the Witnesses and the last of the Shadow-men met in the last of the cities. Here!" he lifted his gaze up, to take in the city that towered and spilled and sprawled around him. "For a time, it was the last free city on our planet it was. Enforcers were laying siege, the people starving, all hope gone. No choice but to surrender.

"The last Shadow-men and the last Witnesses knew their cause was lost, but they knew one thing more. They knew there were other humans dwelling in the stars. They knew that humans from other colonies might be the only hope for their world. They also knew that the Regulators would use the

knowledge gained from our world to subjugate others. All knowledge of other worlds and any knowledge of space travel must also be destroyed."

"But if the Dark Angel came from space," Partridge asked, "it must have known how to travel in space."

"You must remember, it did not land here, it crashed here, severely damaged, and fortunately, we believe, that part of its memory that dealt with space travel did not survive."

"In the last of days, the last Witnesses and the last Shadow-men formed a new order. We would live among the people of our world, even as they became ever more subjugated... and altered..."

"... altered..." Partridge repeated involuntarily. He remembered the identical faces, the lobed skulls.

"... by the Regulators. Our forebears passed on their knowledge although only a few from each generation survived. Some were allowed to appear to be absorbed, in order to infiltrate the inner levels of the Regulators under the guise of obedience, but most committed suicide before the Regulators could absorb them."

"These days, we are limited to infiltrating the enforcers, all the other insiders are so changed, our differences would be noticed. The enforcers wear helmets and masks, though. The danger is extreme, but we must continue to watch them. If the Regulators learned of other worlds, they would seek the means to travel there, and conquer them." He fixed Partridge with a look of absolute fierceness. "Our fight is your fight, the fight of all humanity."

A much younger woman stepped forward. She seemed to be of the same age as Partridge, with rust-colored hair braided together with rags and wrapped. "We knew you would come to free us," she said.

"This is another weird part," Redfire said, eyes shining. He liked weird parts, but even more so when there was an attractive female involved. "...but trust me, well worth it."

"I am Foretells-the-End-of-Times, a prophetess, and we have been dreaming of you for centuries."

"How is that possible?" Partridge asked.

She explained. "The outside of this arco-tower, the place where these others made camp ... we call it the Bush of Whispering Ghosts. Those who sleep in the Bush of Whispering Ghosts have visions of past and future. When we saw your ship come from the sky, we knew the liberation was at hand. I dreamed you. I dreamed all of you, as my mother and my grandmother before me dreamed you."

Something about the girl awakened a random memory asleep in Partridge's mind. His eyes widened. "By God, Tyro Commander Lear is teaching them how to build a tachyon pulse transmitter."

"She is doing what?" Redfire asked sharply, his good humors evaporated.

"She is helping them build a tachyon pulse transmitter, to transmit the Regulators back to Republic."

"We will not let them do that," Redfire said. "And we will not let Ex-Commander Lear finish building a TPT."

Shouts stood and proclaimed. "You will drive the Regulators from the planet, and set us free. You are our liberators, as prophecy foretold. You will cleanse this world with a bright, destroying light."

The five of them looked first at each other, then back at the witnesses. "Crude, could you slagers from reality be any more disconnected?" Roebuck said.

chapter eighteen

Meridian

The Regulators completed their analysis of data extracted from dissection of the deceased specimen. The specimen's brain had survived quite well even after the body failed, and they had discarded the portions not concerned with intellect. This had enabled them both to manipulate and confirm the truthfulness of the cooperative human leader.

In one tiny corner of Halliburton's intellect, the Regulators found a reference to an ancient, and neglected area of mathematics known as chaos theory; the central metaphor of which was that the flutter of a butterfly's wings could bring about hurricanes.

It was discarded as irrelevant.

Meridian — Outside the Arco-Tower

With hands that trembled slightly, Partridge pulled out his medical kit. (The eelworms had been safe enough in and of themselves, but they had harbored an unpleasant parasite that his immune system was aggressively sorting out.) "If it's all right, I'd like to take a blood sample from one of the Witnesses."

The woman, Foretells-the-End-of-Times, stepped forward. "I guess blood is spilled in every battle." She extended her arm. Partridge handed her a small glass cylinder. "Hold this in your fist." She did and was surprised to see it instantly and painlessly fill with blood.

Partridge took it back and clipped it into his analyzer. "Thank you very much."

"What are you doing, Partridge?" Redfire asked.

"A blood test. I am studying the extent of genetic manipulation among the Merids. I got a sample from one of the guards inside, I'd like to compare it to one of the Witnesses." He shrugged. "It might be helpful."

"Tyro Commander Redfire," Driver called, he was gesturing to the side of the tower. Redfire went to join him and Partridge followed. "Look." Driver pointed southward. An alien craft, like the spheres that had escorted them in, but many times larger, hovered over the ground.

"Manic!" said Roebuck. "Sinister Buckyball of Doom"

Redfire scanned the craft with his Spex. It was irradiating the area with gamma rays. "If it comes this way destroy it," Redfire ordered. "Otherwise, let's not let the Regulators know we're here."

"What's it doing?" Partridge asked.

"Sterilizing the Throwbacks, to make sure they can't reproduce." Redfire shook his head.

"By God," Partridge whispered. Redfire looked at Partridge, not that much younger than himself, but still able to have his senses exquisitely stung by the presence of horror. Redfire envied him.

"Come on," Redfire said, and led him back to the group.

Redfire addressed his landing party. "So, destiny is calling us. How shall we answer?"

"What are our choices?" Taurus put in, she was cradling her sore arm and staring at Redfire with a hurt, bitter look.

"Good question, let's start with the basic issue. Are we going to help these people... the Witnesses, against the Regulators?"

Taurus answered him. "Commander Keeler should make that decision. We should hold out until *Pegasus* arrives."

"Za, but *Pegasus* is late and we don't know why. While we are waiting here, Tyro Commander Lear is assisting the enemy. With her help, the Regulators might be able to incapacitate *Pegasus*."

Taurus sighed. "There are five of us, Tyro Commander. Limited weapons, on unfamiliar territory. What can we do against beings who control an entire planet?"

Redfire raised one eyebrow, but did not answer her. The Witnesses were watching their future being debated with rapt attention, but did not comment. In their minds, the outcome had been settled long ago.

Redfire stood his ground. "Ex-Commander Lear can not be allowed to complete her tachyon pulse transmitter. Whatever we decide, she must be stopped."

"It takes years to build one of those, and this planet probably doesn't possess the basic technology," Driver argued.

"This planet already has one," Redfire stated calmly. "There's a TPT buried 300 meters underneath this tower." He smiled to see the desired effect; astonishment across everyone's face; everyone except Roebuck, who was munching some kind of survival tart. "I detected the tachyon field while we were still on *Prudence*. Lear knows about it, too. She's not too inventive, but she can read a data analysis."

He took a deep breath and exhaled it loudly. "She will need to build an amplifier, and a transmission antenna, but it can be done and it wouldn't take long, even with native technology."

"She can't finish before *Pegasus* gets here," Taurus insisted.

"When will that be?" Redfire said. *Pegasus* was more than eight hours late. Redfire had a feeling something was seriously wrong, but there was no point in speculating out loud that *Pegasus* might already have been taken by the enemy.

"Why would Tyro Commander Lear help the Regulators?" Driver asked allowed. "She's loyal to Republic."

"I think it was the sublims," Taurus said.

"Sublims?" Redfire asked.

"They were using ... trying to use subliminals to get to us," Taurus reported. "You know, suggestions just below hearing threshold. They were quiet and distorted. Mostly Halliburton screaming. They could have gotten into her head."

"Za, but we could hear them," Partridge added. "The Merids probably didn't know what our hearing threshold was."

"Why her and not you two?" Redfire asked.

"She's a Republicker," Partridge speculated, watching his analyzer pick apart the blood sample, molecule by molecule. "Different atmosphere, different hearing sensitivity."

"And accustomed to taking orders, not to mention all that cybertech embedded in her skull already. Maybe they got in." Redfire speculated. "Regardless, we will stop her."

"What about the Witnesses?" Taurus asked.

"We'll figure out what to do for them when we have Lear back," Redfire stated firmly.

"What *can* we do for them anyway?" Roebuck shouted unexpectedly. "We can't... five of us ... we can't over-run this planet."

"We have 1,000 trained Warfighters on *Pegasus*," Redfire argued. "Not to mention enough technology to take out the Regulators, whoever they are, from space. If we choose to remove the Regulators, they will be removed."

"You just want to be a hero," Eddie Roebuck said.

Redfire smiled. "Is there something wrong with being a hero?"

"It's you thinkers and heroes that cause all the problems," Roebuck shot back.

"Roebuck, what is your damage?" Redfire demanded.

Roebuck pounced as though he had been waiting for years for someone to ask him this question. "My damage is thinkers like you. You think you're doing me a favor. You thinkers got this brilliant idea about flying off into space and discovering new worlds. Great. No one was stopping you, but you decided it wasn't going to be all you thinker types going. You were going to make room on your ships for anybody who wanted to come along.

"You don't need me, lugging cables around the landing bays, carrying load all over the ship, inspecting cargo, fixing your loose wires. You've got toolbots and auto-mechs and and/oroids who can do the job just great and don't even care, but you have to drag Eddie-fragging-Roebuck along with you,

because you think if you let me go into space, you'll make me a better person."

Redfire cut him off. "And this has *what* to do with us and The Regulators?"

"You thinkers ... you always think it's your job to raise up the lesser beings. You were going to explore the galaxy and you didn't want to leave the lesser people behind. Well, maybe some of us wanted to stay behind. Maybe some of us were happy living our dumb, unexceptional lives on our own dumb, unexceptional planet..."

"Then, why did you sign up, Roebuck?" Redfire asked. "If you were happy on Sapphire why did you sign up?"

"I thought it would get me laid," Roebuck answered furiously.

Driver was scowling slightly, and Redfire picked up that he was thinking of punching Roebuck hard in the gut. Himself, he found it hard not to laugh.

"No one made you come, Roebuck." Redfire said, firmly but not loudly. "You could have resigned at any point in the training process. You could have returned to Sapphire and spent the rest of your life any way you wanted."

"Shuh-right, if I were in Halifax now, I'd be..."

"Eight years older," Redfire told him.

"Whuzza?"

"Eight years older. Eight years went by on Sapphire while we were in hyperspace. What plans did you have for the next eight years of your life? What are you missing out on?"

"Doesn't matter. I can't do it now." Roebuck said.

"That's right Roebuck. We've left, and we're never going back. You made the decision to be here, Now, you're here. Process it! The secret to life isn't making the right decision. It's making the decision first, then making it right." He lifted his head and addressed the others. "That's why we're going to stop Lear... and The Regulators."

A short chirping sound came from Partridge's medical pack. He took it out and examined the results. "Kumbayah!"

"What?" Redfire asked.

"The results of the blood test are in" Partridge turned to Foretells-the-End-of-Times. "You have completely normal human blood."

"Thank you," Ender said with a smile.

"I also got two samples from the ... from the people inside the tower. Their blood has been altered. Genetically manipulated."

"We knew that," Redfire said.

Partridge shook his head. "More than we imagined. The structure of the nucleotides is being altered at the molecular level. That DNA is not human."

"You mean alien?" Driver asked.

Partridge sighed. "Right now, I'd say part alien and part human, but most of the alien DNA is dormant, but I think that gradually, maybe within a few generations, the alien DNA will dominate, and what lives on Meridian won't even be humanoid."

Redfire took this in. "So, the Merids are just a step on the way to... to what?"

Partridge shook his head. "I don't have the AI to extrapolate it out, but the closest analogs the datapad can find are carnivorous plant and a parasitic insect from the Arcadian Rainforest."

Alien invasion. Redfire thought. Battle between species to the death. Survival of the fittest. The ultimate fire.

Suddenly, there was a thunderclap. It was especially startling to the Meridians, since thunder was all but unknown on their world, and this was a loud and willful thunder. High above them, shapes were moving through the air. It looked as though pieces of the pearl-green sky had broken loose and were bearing down on the ground.

"What is that?" Shouts asked.

Redfire smiled from ear to ear. "Cavalry."

The Aves dropped their holoflage shields and bore down out of the sky like mighty birds of prey.

Roebuck jumped up, his arms in a Victory salute. "Za! Za! Za! Krishna be praised!"

"More ships?" Shouts said with a kind of reverence, his eyes trained on the Aves as they grew closer.

"Za," Redfire told him.

"How many such ships do you possess?"

"A lot."

Shouts clapped his hands together. "Prophecy is fulfilled."

Basil settled down gently at the edge of their perimeter, *Desmond* about twenty meters behind. The hatches slid open and the Warfighters came charging out in gray and black battle armor, heavy pulse weapons on every arm.

"There is nothing more beautiful in the afterdawn than a company of Warfighters coming in to save your ass!" Roebuck enthused. Then, Flight Captain Jordan exited her ship, walking on her long, thin legs, her uniform tight around her hips and small waist, showing off her bosom in a way the standard flight suit was clearly not intended to do.

"I take that back," Roebuck said.

Redfire approached her first, Driver flanking him, three steps behind, and Roebuck bringing up the rear

"Status report, Tyro Commander Redfire?"

"Captain Jordan, we have been on the surface of the planet for fifty-one standard hours. Since the time we have left *Prudence*, Technician Halliburton was killed, tortured by the Merids. The others were taken to the leaders of this planet, alien entities called the Regulators. The Regulators want to acquire our technology in order to spread themselves throughout the galaxy. There is a resistance movement on the planet called the Witnesses of the Conspiracy. They infiltrated the ranks of those who serve the Regulators and managed to free Taurus and Partridge."

"And Tyro Commander Lear?" Jordan asked, her ice-blue eyes locked on a point a meter past Redfire's skull.

"Tyro Commander Lear is helping the Merids build a techyon pulse transmitter to carry the Regulators back to Republic, where it will doubtlessly infect Republic's artificial intelligence network and take over the planet." Redfire turned away from her and shouted at the Warfighters. "Is our perimeter secured?"

"Perimeter secured, Tyro Commander!"

Redfire turned back to her. "How much longer before *Pegasus* makes orbit?"

Jordan seemed to be looking past him as she reported, avoiding eye contact. "*Pegasus* is not making orbit. The central BrainCore malfunctioned and took *Pegasus* out of the system. Commander Keeler shut down the drive engines. We have had no further reports, however, two hours after we launched, two Nemesis class missiles were launched from *Pegasus*. These missiles are currently 3.6 hours behind us. Ostensibly, they are to remain in orbit as a threat to secure your release."

Redfire nodded, also looking past Jordan. "Well, this mission is a one-hundred percent Panrovian Cluster Phuck all the way around."

Jordan touched the back of her jaw lightly. "Jordan to Eureka. Please send a message to the incoming missiles indicating that all personnel have been secured and are preparing for evacuation. If the missiles do not alter course, prepare to engage them."

She looked past Redfire again. "What is the Mission Plan from here, Tyro Commander?"

"As I see it, we have to get our people out of here, and I don't think one Aves is enough to take out both missiles."

"Hopefully, that won't be necessary, but if it comes to that, an Aves against a Nemesis missile is a fair fight."

Redfire called out. "Driver, get over here. This is Flight Lt. Driver. He's good with time-tables."

Lieutenant?"

Even someone as socially obtuse as Driver could read that there was something between the Tyro Commander and the Flight Captain. It was in the past, maybe, but not very well buried. "Sir?"

"Can you calculate how much time we have to Evac the planet before the Big Dam Missiles hit?"

"She said 3.6 hours."

"Can you keep track of that time while you chase down those missiles."

"I can do that."

"I want you to take Flight Captain Jordan's ship and intercept the Big Dam missiles before they reach the planet. She will stay here with the Warfighters and me while I work out a plan to get Ex-Commander Lear out of the tower.

"With all due respect, I would rather take *Prudence*." Driver touched the com-link on the inside of his jaw. "Driver to *Prudence*, initiate recall sequence. Enable code: Alpha-zero-zero-two-three."

Meridian — *Prudence*

At the bottom of the tower, *Prudence* rose and began retracing its way out of the cavern, much to the shock and panic of the shock-troopers who had been guarding her. She reached the end of the tunnel and found the entranceway had been closed off. *Prudence* scanned the doors. Blast-shielded. Her braincore analyzed the situation. The blast-shielded bay doors would be resistant to her weapons, but the walls around them would not be.

Prudence aimed her ventral pulse cannons underneath the doors and blew away the foundations. A few blasts from the dorsal pulse cannons destroyed the rest of the structure. *Prudence* raised her energy shields to full and blew through the rubble, bursting out of the base of the tower.

Meridian — Outside the Arco-Tower

Driver closed the projector mode on his Spex. "ETA, forty seconds," he told Redfire.

"All right." Redfire nodded and pointed to the Aves. "Flt. Lt. Driver will take *Prudence* out to intercept the missiles before they make orbit. Flt. Lt. Eureka will hold in high orbit with *Desmond* to provide point defense in the event Flt. Lt. Driver is unable to destroy or disable the Big Dam Missiles."

"And I will be on *Prudence*," Roebuck announced, "in the event that Flt. Lt. Driver can't destroy or disable the Big Dam Missiles."

Driver scowled. Redfire frowned, but having no use for Roebuck, decided not to argue.

"And *Basil*?" Jordan asked.

"*Basil* will stay here to Evac us if the Big Dam Missiles get through. We're going to bust into the tower and get Lear."

"How?" Jordan asked.

"I am exactly two minutes to the left of figuring that out." He looked toward the Witnesses. "Shouts. How do you insert your people into the arco-tower?"

Shouts looked at him quizzically. "We enter through the lowest levels. They are poorly guarded and there are many sewers, and garbage chutes, and ventilation shafts. The enforcers do not even care to guard them, but they end well before the uppermost levels."

"How long would it take to get to the top?"

"We proceed slowly, through hidden passages."

"Can we enter the tower at an upper level?"

"The uppermost levels are well-shielded both by structure and guards."

"I haven't been impressed by the guards we've fought with so far. I think a direct assault might be worth considering. I can put Warfighters in on the same level as Ex-Commander Lear." Redfire's brow furrowed. He thought about blowing another hole in the side using *Basil's* guns, but he feared the resulting attention would make further infiltration impossible. He wished he could force a flash of inspiration upon himself.

One hundred meters above them, there was a sharp snap, crackle, and pop. A stray lick of the artificial lightning generated by the electrostatic dischargers spilled over the roof and poured down the side of the arco-tower like liquid electricity. Halfway down the side, it burst into fluorescent spiders that skittered down the sides and off into the air.

"Who-ee," said Redfire, with a certain understatement. "Hey, Shouts, do you know what those electrostatic dischargers are for?"

"Electrostatic dis-charge-ers?" Shouts repeated slowly.

"The sparky things," Redfire repeated.

"Öh, the sparky things," Shouts chittered. "We have no knowledge of their functionality. The Regulators built them... six hundred years ago... for highly uncertain purposes."

"They're ionizing the atmosphere," Partridge put in. He was analyzing them with his Spex. "Changing it chemically... within a few thousand years, the atmosphere is going to be toxic to humans."

"It's also altering the planet's electro-magnetic field," Jordan reported. "Our instruments detected..."

"The planetary magnetic field being altered into a series of coherent pulses, I know." Redfire looked around the company. "Excuse me," he said, and started walking toward *Basil*. "Captain Jordan, you might want to come with me. Taurus, you, too."

Shouts also followed, making a reverent gesture as he entered the Aves. Inside the ship, Redfire sat down a science station and brought up a three-dimensional display of the arco-tower, with energy-flow patterns highlighted. He then instructed the computer to animate the arco-tower in real-time through data-link to the external sensors.

He brought up a second hologram. Isometric atmospheric analysis. When he saw the readings, he gave out a low whistle. He pulled in a satellite analysis from one of the orbiting probes.

"What is it?"

"First, Partridge is right. The electrostatic dischargers are apparently part of some kind of atmospheric processors. The composition of atmosphere around the cities has been altered, slightly, but over time, it will be completely different.

Flight Captain Jordan raised a single perfect eyebrow. "Perhaps, an atmosphere to support an alien species."

"Fair bet. The dischargers draw energy from the planet's magnetosphere. When they spark, there is a planet-wide power surge. Every discharger on the planet imparts a specific signature. Cumulatively, it creates a unique energy pattern in the planet's magnetic field, which is in turn projected into space."

"Like a beacon," said Jordan.

"Right," said Redfire. "Let me show you what I want to do."

Redfire showed her what he was going to do.

Jordan's eyes widened. "Are you serious?"

"Absolutely, it will be a masterpiece, if I can pull it off."

"I've heard that before," Jordan muttered, but no one but Redfire heard her.

Redfire turned away from his station. "Shouts, you'll want to pull all of your people off the arco-tower. Get as far away as you can."

Meridian — Inside the Arco-Tower

Lear brushed her thin bangs off her forehead and leaned back. She had spent nearly seventeen straight hours taking the interfaces through a series of experiments to prove the validity of her approach.

The first test was simply to demonstrate the existence and the properties of the tachyon field she had detected underneath the arco-tower. She had directed specifically phased temporal harmonic energy into the field, so that it swelled outward, affecting the function of an atomic clock placed in the lower levels of the tower. Comparison with atomic clocks in other cities showed the tachyon field had caused the clock to lose time.

The second test was to demonstrate how tachyon pulses could be encoded to convey data. This time,

she programmed the harmonic energy pulses to affect the function of the atomic clock in a specific pattern that could be decoded using another atomic clock. It was fundamentally the same method used to encode and decode TPT signals in the receiver orbiting Republic. An ever-more-complex series of algorithms was encoded into the signal, and it was decoded with 100% accuracy, to the satisfaction of the Regulators.

"All that remains is to encode the actual data for transmission, and then transmit." She pointed to a monitor displaying the same piece of Meridian architecture that had captured Lt. Cmdr. Redfire's attention. "This structure at the apex of your arco-tower will function adequately as a transmission tower."

"The Regulators will require assurance that the transmission has been received."

Lear pinched the bridge between her eyes. "As soon as the signal is sent ... is set to send repeatedly ... we can begin construction of a receiver."

"The Regulators demand to know how long it will take to construct the receiver."

"It will have to be at least a thousand kilometers in diameter. Depending on the availability of materials and technical assistance..."

"Two-hundred and four days," The Interface interrupted.

Lear wearily nodded her assent.

"The Regulators have detected the approach of a large space vessel, with sufficient capacity to disrupt the transmission of the data and construction of the receiver antenna."

"I can handle *Pegasus*. The important thing is that the signal be sent before *Pegasus* makes orbit. How long will it take you to encode the Regulator program into a form that I can transmit."

"It has been done."

Lear looked at the data on her monitor. "I would have expected the dataset to be much larger."

"The dataset is a self-extracting program detailing how to construct the Regulators in a receptive host. It is more efficient than sending the actual Regulator protocols."

"Good," said Lear. "Let's prepare to encode. We will still require a substantial amount of energy."

"The Regulators demand to know, how long before the dataset can be transmitted."

"Can you confirm that a large electrostatic discharge will take place in fifty-eight minutes time?"

"Confirmed."

"Then that is when we will transmit." She smiled. "Within an hour, the Regulators will have a whole new world to conquer."

chapter nineteen

Pegasus — Primary Command

Pegasus looped around a large, icy moon in the middle of the Meridian system, close enough to pull a few tendrils of atmosphere along behind it. With this last swing, the great ship was once and finally on course to Meridian, and making almost decent speed.

Eliza Jane Change had consented, after persistent and annoying persuasion from Specialist Alkema that eliminating the risk of any error was only too critical, to the assistance of an and/oroid. The androgynous figure with the smooth, dove-gray face sat at the station across from Change, double-checking her calculations and finding, to her smug satisfaction, no errors. Change turned to Keeler. "It's working, Commander. Our speed is .275c, and we should be at planet Meridian in another three hours, nine minutes of ship time."

"Are the Aves transmitting intercept orders to the landing teams?" Keeler asked Kayliegh Driver, who was still at Communications.

"Affirmative."

"Any response?"

"At light speed, the transmissions won't reach the landing parties for another nineteen minutes."

Keeler turned and crossed the bridge, tapping his walking stick as he went. "Must go faster," he muttered. "Must go faster. Is there any way we can get any more speed?"

Change answered. "Commander, we had to program the engines in advance to make it this far. We could rig to go faster, but programming time would cancel out the increased speed."

Keeler sighed. "I figured as much."

"I think our time would be better spent calculating contingency use of the maneuvering thrusters, in case we find ourselves on a collision course."

"Why, are we moving into an asteroid field?" Keeler asked.

Change answered. "Negative, Commander. There are probably some stray bodies in the system, but it's very unlikely we would hit any of them. I'm more concerned we don't collide with Meridian."

"I thought you calculated our trajectory for a high orbit. Maximum safety margin."

"I did."

"And your calculations are accurate, right?"

"As accurate as can be, but Meridian is in motion and my calculations are based on its estimated position. That introduces some uncertainty. There is a small chance that we may need to take corrective measures in order for us to ..."

"... to not plow head-on into the planet," Keeler finished.

"The angle of impact would most likely be oblique."

"Oh, that's not so bad then. It just means we'd be a big stain instead of a deep crater. Lt. Alkema!"

Alkema appeared from behind the Tactical Station. "Thanks for the promotion, sir, but I thought I was just a Spec."

Keeler sighed loudly. "No wonder you get so much done. I may never promote you. Give me the status on Defensive Systems."

"Caliph wrecked the arrays pretty thoroughly, but I think we should have a few on-line by the time we reach the planet."

"No telling how soon, though."

Alkema looked over his readings again. "I'm afraid not."

"Do you ever sleep, Specialist Alkema?" Keeler asked.

Alkema blinked at him. "Four hours a night. Same as everybody."

Was I ever like that? Keeler wondered to himself. It suddenly struck him that he had never even ventured into space until the first time he had gone to Republic as a command nominee for the Odyssey Project. He had not even ventured much out of New Cleveland except for Vernal Recesses spent on the beaches in Kandor. Otherwise, there had never really been anything he wanted to see.

So, what in perdition am I doing here? he wondered again.

Doing your dammed job, the voice of an Old Man answered in his head.

Meridian — Basil

Basil's engines held the briefest of arguments with Meridian's gravity and prevailed. It shot into the air and began a looping course to the top of the arco-tower. Far below, the Witnesses fled the tower under the cover of a dozen Warfighters. Another dozen were sitting in the back of *Basil*, ready to man weapons stations should the Sinister Buckyballs of Doom reappear.

"Course laid in," Jordan announced.

"Adjusting shield polarity." Redfire reported.

"This is insane," Jordan muttered.

Redfire could not keep a tiny smile from turning up the corners of his mouth. "You said the exact same thing in New Sapporo, eight years ago."

"It was sixteen years ago, and I was right in New Sapporo."

"Right about what?" Taurus asked.

Jordan tightened her grip on the thrust levers. "Never mind."

"She was right about about 'Ice Rage,'" Redfire explained. "One of my earlier pieces; a flirtation with concrete expressionism. Another time, I'll tell you about it. Right now, take us in, Captain Jordan."

Jordan nodded and pushed the stick forward. *Basil* surged ahead, angling down to a point directly over the arco-tower.

"Flight Captain Jordan!" Molto barked.

"What is it Specialist?"

"Message just received from the Aves *Yorick*."

"Transfer it to my head's up." So, *Pegasus* had launched more Aves. This was a good sign. Jordan examined the message grimly and then passed it to Redfire.

PLEASE DESTROY TWO NEMESIS MISSILES LAUNCHED FROM *PEGASUS*.

"Acknowledged," Jordan said. "That clears up one ambiguity. All stop, holding at 1,000 meters from intercept." She looked through the canopy. The dischargers were dead ahead, slightly below. Electrical charges crawled up and down their metallic frames like sparking hyperactive caterpillars.

Redfire watched the monitors, looking for signs of the energy build-up that would presage the next discharge of power into the atmosphere. The model of the tower he was reading looked something like a map of a storm cell. Most of the tower's area showed a lime green energy flow, except for the dischargers themselves, which were emitting a sizzling purple. Rapidly, a volcano-like plume of red began rising through the tower. "Go!" Redfire ordered.

"Moving to intercept point," Jordan said calmly.

Basil flew into position directly above the dischargers as a giant surge of energy spilled into the atmosphere.

"You better know what you're doing this time," Jordan purred.

Redfire reached over his station and made a last adjustment. "Shields at maximum! Brace yourselves, this is going to be a big one!"

The first pulse of energy hit, felt like nothing, but then was followed by a surge much larger than Redfire had anticipated. The ship was slammed with a force of energy like all the power of hurricane, focused and released in a single microsecond. *Basil* acted like a circuit breaker, directing Terawatts of energy that should have vented into the atmosphere back into the tower.

While the shields were more than equal to the task of protecting the ship from the energy, they did nothing to held it steady in the exploding air.

"Whoa, baby!" Redfire yelled, reaching for an Oh-Shit handle as the ship pitched violently. "I like it like that."

"Stabilizers at maximum," Jordan reported.

Redfire watched his display. The energy patterns had gone from red to orange and were shooting back into the tower.

It was too much feedback for the dischargers to handle. They exploded in a spectacular eruption of burning metal shards. The upper levels of the tower also exploded, blowing walls into dust and leaving behind a blackened forest of structural supports. Most of the energy was spent in the uppermost floors. Lower down, the structure was strong enough to contain its share of the energy feeding back into it, but the entire power distribution network was overwhelmed, burned out and collapsed.

Now, the schematic on Redfire's display was completely dark. "Move in and prepare for landing," he ordered Jordan. If there were any people left alive in the topmost layers of the arco-tower, he doubted they would be able to offer much resistance, but he didn't think they would be clear for long. "Warfighters, stand by to deploy as soon as we are within jump distance."

He checked the scanners. Lear's bio-Sliver displayed her location. He also noted she was in fine physical shape, although her elevated heart rate and adrenaline secretions indicated that the destruction of the arco-tower's power system had surprised her as much as the Merids. He had the ship's scanners map out the interior of the building and fed a schematic diagram of the internal structure to the Warfighters.

Meridian — The Arco-Tower

Basil descended to what was left of the roof of the arco-tower. "There's no clear place to set down," Jordan reported. "I'm going to engage the counter-gravity and let us hover above the debris."

"Close enough for a jump?" Redfire asked.

She did not respond verbally, but shot him a quick "of course, close enough for a jump" look.

A few seconds later, the rear hatch opened and Warfighters began jumping through in twos and threes. Redfire looked at Taurus and was about to ask if she felt up to going, but she was already charging the open hatch. Redfire ran after her and leaped into space.

The roof of the tower came up surprisingly fast. Redfire's legs and knees stung with the sudden impact. He looked up to see half the Warfighters already deployed in a protective perimeter. Two of them were working on gaining access to some kind of panel that led into the arco-tower. In their direction, Redfire moved, with Taurus at his side.

The electrostatic discharge had left the air crackling dry with a reeking stench of ozone. Redfire's nostrils stung as he surveyed the damage he had done. The dischargers were scorched, melted and blackened, like the twisted skeletal hands of a hideously burned monster, reaching desperately toward the sky. *Nicely done*, he thought to himself. *I'm a killer when the muse is upon me.*

A panel of the tower swung open with a loud groan and three Warfighters trained their weapons into the darkness within. They dropped a stun grenade into the hole. There was a flash from below, and then the Warfighters headed down. Redfire and Taurus set their Spex to Low-Light Environment Enhancement mode and went in after them. Two more followed them. The remainder stood guard outside.

Through a tangle of debris — structural supports, conduits, the remains of pipes and cables — they climbed down until they reached the highest intact level of the Arco-tower. The visors made the damaged interior of the upper arco-tower even more surreal as they made their way along. It was actually brighter than Redfire had expected. The Merids were masterful in the use of light-transmitting crystal. Redfire saw the illogical angles describing the walls of the corridor they navigated, burned out patterns of power conduits scrawled across the walls like robot hieroglyphics.

"Tyro Commander Lear is four levels below us, 120 meters southeast," Taurus reported.

"Got it," Redfire confirmed. Led by the Warfighters, they pushed their way further into the tower. "Look for a way to get down to her."

"There's some kind of maintenance access shaft about fifty meters ahead," one of the Warfighters reported.

"Looking for it," Taurus confirmed. She pointed to a wall panel. The forward charge of Warfighters ripped it from the wall, revealing a space behind, the head of a shaft leading downward.

The shaft was about two meters wide, circular, with hand-grips running along two sides. One of the lead Warfighters was already dropping into it by the time Redfire and Taurus reached the entrance. Two went down while one remained behind to guard their backs. Taurus climbed into the shaft and Redfire

followed.

Before they had made it down very far, they heard two sharp *ship-ship* sounds; the sounds made by shoulder-cannons in non-lethal firing mode.

"What's happening?" Redfire hissed into his mouthpiece.

"Two unfriendlies encountered us at the shaft exit," a deep male voice answered in his com-link. "They are no longer in play."

"Acknowledged." So, the Merids had responded a little more quickly than Redfire had expected. Suddenly, there was a snap loud enough to be heard without auditory enhancers as Taurus's foot failed to connect completely with one of the footholds in the shaft. The knee she had earlier injured falling into a paranet was wrenched in a direction it had never been meant to go. She clamped her jaw shut tight to keep from shouting out and slid to the bottom of the shaft.

"Taurus!" Redfire called in a shouted hiss.

Taurus didn't answer. She was still clamping her jaw shut against the pain. Redfire double-timed the remaining length of the shaft.

A large, muscular, brush-cut Warfighter had pulled Taurus away from the shaft and was pulling a pain-suppression ampoule out of a sleeve-pocket in his battle-jacket. Redfire leaned over to Taurus.

"This was a stupid idea," she growled through clenched teeth.

The Warfighter squeezed the ampoule against her neck.

"We should get her back to the ship," Redfire said.

"Help me get her leg splinted up," the Warfighter barked. "Sir."

Redfire checked his chronometer. The missiles were due in forty-two minutes. He bent over Taurus as the Warfighter popped her knee joint back where it belonged and began wrapping an immobilizing bandage around the leg.

Neither Redfire nor the Warfighter saw the Merid Enforcers approaching from behind their backs. Taurus had been squeezing her eyes shut to block the pain, but as the ampoule released its warm, sweet load into her bloodstream, she relaxed just enough to open them, and just in time to see the Merids raise their weapons.

Reacting as her training dictated, Taurus reached up and grabbed Redfire's arm and twisted it around backward, pointing his pulse weapon at the Merids. She wrapped her hand around his wrist and squeezed. The pulses took out the shock troops in three neat shots.

Redfire wrenched his arm away from her, turned and saw what had happened. "Damb, but you are good."

"There's a lot more going for me besides unbelievable beauty," Taurus purred, wincing at the same time. "Now, get my leg fixed."

Redfire checked his Spex. Lear was on the next level below. "Get Taurus back to the ship. I'll get ExTC Lear."

"I would not advise going in alone, Commander," said the Warfighter.

"Taurus is going to need both of you guys to make it back. No sense in all of us getting crispy when those Big Dam missiles hit."

The three of them looked at him dubiously. Redfire tried the com-link. "Redfire to Lear, please respond. Tyro Cmdr. Lear, if you can respond, please do so."

Nothing.

"With all due respect, commander, the situation sounds rather troublesome," the Warfighter insisted.

"All the more reason to risk only one of our precious selves. Look, I'm going by myself. No argument. Once Taurus is safe, you can drop down and bail me out, but I have no more time to argue with you."

Redfire moved, keeping both hands in front of him, pulse weapons ready. The Spex indicated Lear was directly below a large octagonal chamber on his level that held eight Merids. Four turns, and a hundred meters later, he came to doorless, open chamber. He saw Merids standing around a viewport built into the floor. He reached into the front of his battle-jacket and withdrew a smart grenade. He raised

the small sphere to his lips and whispered instructions.

"Eight life-forms in the next room. I need you to take them out of play. There is a kind of portal in the floor. If possible, destroy it, making a clear path to the next level." He opened his palm and the grenade drifted away, describing a course toward the waiting Merids.

None of them saw it enter, so fixed were they on the task of monitoring Lear. It drifted over their heads to a point it calculated to be at the center of the group. There was a bright flash as the grenade flooded the chamber with an intense energy burst that disrupted the synaptic pathways in the brain. When the flash cleared, the Merids were down, but even before then, the grenade had punched a large hole in the center of the portal.

When Redfire rushed in a second later, he found the hole in the portal to be dangerously jagged. No way could he jump through. Then, the dust cleared, and he saw Executive Tyro Commander Lear glaring up at him through the hole. She was wearing the same gray robes as the Meridian Insiders. Her arms were crossed in front of her chest, and if looks could kill, she would be on trial for genocide.

"Just what do you think you are doing, Tyro Commander Redfire?"

Redfire raised his pulse cannon. "Stand back," he ordered. He fired a shot into the portal just as Lear drew away. Half of the remaining glass collapsed. Redfire leaped, made a smooth arc through the middle of the hole and landed in a crouch, his boots and the supports at his knees taking the force of the landing. He stood and extended his hand to Lear. "Let's go."

"Go? Go? Go where exactly, Tyro Commander?"

"There's an Aves on the roof standing by to evacuate us. There are also two Nemesis Missiles en route from *Pegasus*, probably launched by one of your glitches. This whole planet is about to be destroyed, with or without us on it. I would prefer to be off it."

"Did you do this?" Lear said, gesturing toward her dead monitors.

"Did I do what?"

"Send an energy feedback through the system destroying all my work... twelve minutes ago."

"I did that."

"You carried out an unprovoked attack on a new world."

"You say that as though it were a bad thing."

She slammed her fist on the top of her console. "Damn you! Damn you and all your stupid, undisciplined, reckless ... How dare you! We do not attack other worlds. It is against every principle of the Odyssey Charter." Her voice dropped to a malevolent hiss. "When we get back to *Pegasus*, I will have you frozen and sent back to Republic for trial."

"I hope there's room in the transport for two," Redfire said, staring her down. "You were collaborating with the alien rulers of this world to help them take over Republic."

"Don't be ridiculous. Do you really think these poor backwards people are some kind of threat?"

"You were going to transmit the Regulators to Republic."

"Or, maybe, I was going to send Republic a warning."

Redfire did not respond. He was only prepared to halfway believe her, but he recognized that sending a warning would make sense.

She went on. "Do you know much about interstellar tachyon-pulse communications, or is that outside your area of interest? The antennae that serve the Republic system are designed with huge information buffers. These hold incoming messages in order to protect our planetary communication system from contamination, cyber-warfare, spaceborne computer viruses and anything else that could be transmitted through space.

"With advance warning, we could hold the Regulators in an isolated facility, study them, learn their weaknesses. When the Phase II ships arrive in the system, they would know how to defeat them without destroying the inhabitants. And we would know, too, should we encounter their kind again."

Redfire tightened his landing pack. "It's all academic now. The missiles are coming and we have to get out of here."

chapter twenty

Space — *Prudence*

Prudence emerged from Meridian's atmosphere and the planet became a curve, then a sphere, then spot behind her. Driver could not have been more relieved. On the ground, *Prudence* was vulnerable, in space, she was a fearsome bird of prey. Like his ship, he only felt himself in his element when he was in flight, when he had taken wing and broken away from gravity's selfish hold.

Before him spread a field of stars and a definite mission: Seek out and destroy a pair of distinct and identifiable targets: Nemesis Missiles. He rode *Prudence* hard, and she scanned through space, looking for prey, united in their purpose.

Only the presence of Eddie Roebuck kept him from perfect, undistracted utility.

Roebuck had started out in the back of the ship doing God-knew-what and that was absolutely acceptable to Driver, but when he appeared on the flight deck and plopped himself down in the right-hand seat, Driver became instantly perturbed. Then, he said something that almost made Matthew pitch the ship. "You're that pilot that Eliza likes, aren't you?"

Driver goggled like a stunned woolbeast. "Excuse me?"

"You know Eliza Jane, she's the ship's navigator or something. Does something on the Bridge, anyway. She always eats breakfast with this pilot she likes. I didn't put it together before now, but I'm pretty sure you're the guy. Kinda ironical when you think about it."

The question on Matthew's mind was, "*What do you mean, like?*" but it seemed completely adolescent, and in the stumble of successive thoughts, he ended up saying, "I thought you and Eliza had ... some kind of relationship."

Roebuck snorted and shook his head. "Not in the way that you're thinking, beauty. Eliza has standards. She would never settle for less than a hero, and I'm no hero, I'm just a rat."

Matthew could not think of anything to say, but his eyes must have spoken for him.

"Don't look at me like you feel sorry for me. I like being a rat. A rat who knows he's a rat is lots better off than a rat who thinks he's hero. Believe me, Eliza Jane wants a hero, the kind of guy who flies through space and goes around savin' planets."

If there was envy or regret in his tone, Driver missed it. His heart was the heart of a pilot, formed around calculations of relative and absolute position, normal flight procedures, situational awareness, and power-to-mass ratios. Now, for the first time, it was touched by irony. He brushed irony off and told it to keep its hands to itself.

Driver activated a display showing their quarry. "How much do you know about Nemesis missiles, Eddie?"

"Probably nothing."

Driver filled him in. "Each missile carries twelve programmable yield warheads. They could wipe out every living thing on the planet, but that's not important to us."

"Sounds pretty fraggin' important to me."

Redfire pointed into the display. "In terms of defenses, they have the same shielding and pulse cannons as we do. They can give as good as they get. They can also maneuver evasively."

Roebuck paused. "I don't like the way that sounds."

Driver pushed the thrusters to full power. "Aye. I have never been trained in defeating a Nemesis missile. No one thought we would be fighting against our own weapon systems."

Roebuck considered this. "Well, they haven't either, right?"

"What do you mean?"

"You were never trained to fight the missiles as an enemy, but the missiles don't know we're the

enemy."

Driver frowned in thought. "Nay, but they will know when we start shooting at them."

"So, don't shoot at them until you're right on their asses."

Driver pictured it in his mind, and then nodded. "All right, that sounds good."

"Can you get up that close to them, beauty?"

"If we come up from behind, slowly, not on an attack vector, they'll be programmed to think we're a reconnaissance ship. We could take out both of them at point blank range."

Roebuck nodded vigorously. "I don't know about any o' that, but it sounds like you're thinkin' like a hero."

Meridian — The Arco-Tower

Half a million kilometers below, Lear and Redfire picked their way through the dark upper floors of the arco-tower. "Redfire to Jordan," Redfire said into his com-link.

"Jordan, here."

"Ex-TC Lear and I have exited the science chamber and are proceeding upward. How long do we have?"

"Seventeen minutes. Any longer, and we won't be able to get *Basil* to minimum safe distance."

"Acknowledged, Redfire out."

Deep Space - Prudence

Roebuck ticked off the range. "Closing to 10,000 kilometers... 8,000 ... 4,000 ..."

"Holding at four thousand," Driver read back. Of course, it was impossible to see the missiles from here, but he could not resist looking through the canopy. "I'm going to lock on with passive scanners. If the missiles detect an active lock, they'll respond with evasive action."

Before Driver could finish the passive scan, the display showed the missiles splitting up, each moving beyond *Prudence* weapons range. "Mother of us all," Driver cursed under his breath.

"What?" Eddie asked.

"They split up. I can't take them both out," Driver said.

"Aw, slag, we should have taken two ships. Two missiles. Two ships. Why can't we learn to fraggin' add!"

"Two ships," Driver said to himself. He thought of the two Accipiters on *Prudence's* wing tips and calculated they would not be able to catch either missile. "Right, we'll destroy one, and when the other one gets to Meridian, we'll try to squeeze them between us and *Desmond*."

"Which one do we pick?"

"It doesn't matter." Driver pushed *Prudence* to maximum thrust and bore down on the missile that had dodged to starboard.

Meridian — The Arco-Tower

"Are we lost?" Lear demanded.

Redfire activated his Ambient Lamp. This area had sustained more damage, and they tripped themselves on small piles of rubble. Ahead, he saw a beam of light coming from a hole in the ceiling, the shaft he had come down before. "Neg," he told her. "We're almost through."

The tower shuddered and the floor lurched below them, and big pieces started to crack and fall into the level below.

"Curse!" Lear cursed, as she lifted herself from the ground. Redfire gave her his hand and help her up.

"Keeler will lose his command for this debacle." Lear vowed.

"You disgust me," Redfire told her.

"Your handling of the landing team will also fall under scrutiny," Lear added.

"I shudder. I am sure when the time comes, I can come up with a pretty good story about acting in the best interest of the mission. I think I'll call it, the truth."

Lear snarled back. "I followed procedures. I made contact according to procedure and I comported myself according to procedure. I am shielded, Tyro Commander. Shielded!"

Redfire said nothing, but focused on finding another shaft that led to the uppermost level.

"You and Keeler might both be put into stasis for gross dereliction of duty. You might comfort yourself in that the anti-matter annihilation of an entire planet... an entire civilization.... must be the ultimate achievement in your field of art."

Redfire turned just long enough to glare at her. "You don't understand art at all, do you?"

Deep Space - *Prudence*

Driver had shut down all of *Prudence's* systems except for flight controls, navigation, and minimal life support. Holoflage shields dampened any residual energy signature. The cabin was chilled to the minimum functional level.

Through a complex series of feints and parries, Driver had managed to pull within 12,000 meters of his target. Driver was determined to splash the missile before it reached the little green planet represented by a marble-sized dot in the corner of his display. With a delicate push of the thrusters he moved in still closer.

"I am on you," Driver repeated. "I am on you," he whispered and whispered until it became a chant.

"Can he see us?" Eddie Roebuck whispered. The enhanced perspective gave an impression that the huge missile was right on top of them, filling the view of space beyond the canopy. Driver had pressed his piloting skills beyond what he would have previously supposed to be their limits to get this close, to get his one chance at taking out this killer.

The missile was flashing through space at the speed of a lightning strike. Driver and *Prudence* were faster still, and yet in the vastness of space, it seemed as though they were standing still. "I am on you," Driver said one last time. "You are mine." His free left hand, which had been hanging lightly in the air above the weapons panel, descended gingerly. A moment later, his right hand pulled back on the thruster bank.

Prudence closed the distance in the time between seconds, giving the missile no time to evade. There were eight bright flashes from the forward dorsal weapons brace as *Prudence* let loose her fury, then flipped backwards and peeled away. Two bolts tore holes in the missile's shielding, two more tore holes in its armor plating, the four remaining weapons buried themselves in its belly then detonated. The missile exploded amidships, and when the anti-matter cells ruptured, space was rendered with an explosion that tore molecules apart.

"Crude!" Eddie Roebuck said. "Whoa!"

"Target negated. *Prudence* to *Desmond*, one target negated."

It took several seconds for the message to cross space, and as many for the response to come back. "This is *Desmond*. *Prudence*, according to our calculations, you are not in an optimal position for intercept. We will intercept the remaining missile, then we proceed to landing zone and evacuate all personnel in event we cannot take it out of play. *Desmond* advises you to return to *Pegasus*."

Driver favored the com-link with an irritated look. "*Desmond*, we have no bearing on *Pegasus*."

"*Prudence*, scan along heading 182 by 020."

Driver oriented the sensors for those coordinates. Identity codes began flashing in the corner, and the image of *Pegasus* appeared.

"There she is," Roebuck said joyously.

Driver frowned. "Acknowledged, *Desmond*." He brought the ship sharply around. "I am sending a message to *Pegasus*, but we are going back to Meridian."

"Why?" Roebuck asked.

"Because *Desmond* can't intercept those warheads."

"How do you know that?"

"The other missile will spot *Desmond*, it will recognize a point defense and launch its warheads before making orbit."

"Whatever that means. What are you going to do about it?"

"I'll take *Prudence* into the atmosphere on the night-side, swing around, come out on the dayside and knock out as many of the warheads as I can when they enter the atmosphere." He paused, as though having to admit something difficult. "I won't be able to take out all of them, but we might be able to save at least one of the cities."

Roebuck nodded. "I think I know which city."

Prudence changed attitude, and bore down toward Meridian at maximum velocity.

Meridian — Orbital Space

The remaining missile approached Meridian. Its brother, in the last nanoseconds before it was destroyed, transmitted a report as to what had happened. This missile knew it must now finish its mission alone. Far ahead, it detected another ship of the kind that had destroyed its brother missile, lying in wait.

The missile slowed to give itself additional time to calculate a strategy. It searched its memory banks and found a solution devised by a military tactician on Republic. The missile calculated the odds and was satisfied it would work.

Three rows of hatches opened rapidly across the front and middle two-thirds of the craft. It released the warheads from their bays. Momentum kept them in place around the mother-ship, until a flotilla of small, delta-shaped craft surrounded it. The missile plotted the locations of the surface targets they were supposed to destroy. There were ten cities on the planet. It could finish, with two warheads to spare. If it became unnecessary to use them, the Nemesis would recall the remaining two warheads and carry them back to *Pegasus*.

The Aves was closing, still, but now the Big Damage Missile was an empty vessel. It activated its holoflage shields, broke away from its swarm, and turned to face the Aves.

Orbital Space – *Desmond*

"Target has gone dark," reported, Specialist Rockatansky, the weapons officer on *Desmond*. Rockatansky was a heavy, cream-skinned woman from Republic, with big hands and dark curly hair.

Eureka, whose ship had once been scorched by a careless technician named Roebuck, responded, "Calculate flight path."

"It could go anywhere. Switching to holoflage detection mode."

Eureka thought for a moment. "Hold position here. Set weapons to autonomous targeting mode," he ordered his weapons officer.

"Target re-acquired."

"Give me the coordinates."

The weapons officer shook her head. "You won't believe this."

Eureka looked at the readings. The Big Damage was bearing down right on them. He instinctively began evasive maneuvers, when suddenly, the Big Dam dropped out of holoflage dead ahead of them and fired its pulse cannons across their wings.

"Sh—" Eureka began, as he took *Desmond* into a steep, evasive turn. The Nemesis dodged underneath him, then roared back into space, knocking *Desmond* to the side with a full burn of its thrusters.

"Fire all weapons!" Eureka yelled.

"It's reversing course," the weapons officer called.

"Reversing course?" Eureka shook his head. He brought his ship around. "Engaging in pursuit."

"It's running away from the planet," the weapons officer repeated. "200,000 kilometers from surface... 220,000...."

"Disregard that," Eureka ordered. "What is our range from the missile?"

"40,000 kilometers."

That was when the ship's sensors intercepted a command being sent from the missile to ten of the warheads it had left in space, just outside of the range of *Desmond's* sensors. Now, the ten warheads, shielded behind their tiny holoflage cloaks, fired their thrusters to rain down on the unprotected planet.

The weapons officer realized it first. "I'm reading ten warheads bearing down on the planet."

Eureka was stunned. "The missile lured us out of range. It had already launched the warheads and it used itself as a decoy." He shook his head, his cheeks burned with rage and embarrassment. He put both hands on the controls. "We have to take them out."

"They're dispersing."

Eureka watched the formation of warheads break and scatter, still high above the planet's surface. Without another word, he pressed the thrusters forward and went after the nearest warhead.

Meridian

When the Regulators surveyed their world, they did not see green skies or tumbledown megalopoli, or the faces of the people whose lives they utterly controlled. To them, Meridian was a data set, to be manipulated in accordance with their instructions.

The Regulators were not evil. They were hardly even sentient. They were tools, instruments, with an explicit set of instructions to follow. Their instructions involved shaping the world to fit a design. They did not see the design in social or political term; only a set of specifications to be met. And the Regulators were quite diligent in making sure the specifications were met, even if they neither knew, nor cared, why.

Even without sentience, in their dark hearts, they knew how to recognize patterns. They recognized a pattern in the data set from the tower that indicated that well-armed persons from the outside were carrying out an assault. They had monitored the arrival of two more of the ships of the type that had come earlier, and had monitored that ship's violent activities, which had resulted in a number of life form terminations and some minor damage to the structure.

They had also monitored the approach of two more ships, whose trajectory was indicative of still more assaults to come. They had observed further, one of the ships nearing the surface and dispensing a detachment of what readings indicated to be very powerful warheads.

Finally, at the periphery of its vision, it had detected the double-diamond shape of a huge spacecraft. It had thought to take control of this last craft through carefully directed pulsations in the magnetic field of their planet. This plan had evidently not been successful.

There was evidence that this large spacecraft was the mothership for the smaller ships that were causing so much damage to the dataset.

The memory center extracted from the brain of the dissected human specimen had told them that the large ship contained over 6,000 humans and possessed technological capabilities beyond their earlier estimations.

When the capabilities of the approaching spacecraft were correlated against the probability of an armed response, the Regulators grew concerned. The possibility of prevailing against an armed assault was less than 1 per cent.

This was a bothersome, potentially hazardous situation requiring defensive action.

Some kind of memory was triggered, a battle-memory. It had been a very long time since the Regulators had needed to access this memory, but they always had been prepared for their own defense.

It was determined to strike pre-emptively, and make preparations for emergency evacuation.

The hundreds of hatches within the long struts that ran down the sides of the towers throughout the cities burst open, and out of them shot silver and black spheres, about six meters in diameter; vicious-looking things, with thick spiked bands along their equatorial lines. The air above the city filled with them, and the sun was blotted out as their small, powerful, intensely radioactive engines burned trails into the sky.

The radiation would kill a lot of people outside the arco-tower, but this was no concern to the Regulators.

chapter twenty-one

Pegasus — Primary Command/Main Bridge

"ETA to Meridian," Keeler demanded.

"Ship Time, twenty-seven minutes," reported Specialist American. In the forepart of the outer bridge, a turning three-dimensional projection of Meridian appeared the image relayed from the *Aves Yorick*, pacing *Pegasus* 100,000 km in advance. Alkema tightened the view further to a close-up of one of the arcologies, from which a swarm of metallic objects was arising.

"What is that?" Commander Keeler asked.

Alkema answered him. "Probes detected a massive launch of them from every city just as the warheads from the Nemesis missile deployed. Probably some kind of planetary defense."

"They look ... fast."

"Dilation effect," Alkema explained. "*Pegasus* is moving close enough to the speed of light that our time is slowed, but the planet is in normal time. Everything that happens on it looks fast to us."

"I knew that," Keeler muttered. Then he shouted orders. "Alert all stations. Go to Battle Situation Two, repeat, BS2." He leaned over Alkema once again. "What's the status of our defense systems."

"All defensive shields and pulse cannons are operational."

"Good."

"... but there's no central BrainCore to link them. The pulse cannons can't lock onto a target except the ones with their own sensors."

"How many of those do we have?"

"Only about half. I think it should be enough."

Keeler turned. "Specialist American, order Flight Core to get as many Accipiters ready for launch as they can."

"Aye."

"Alkema, Dave, what's the status on our communications net?"

"Internal communications have been restored throughout the inhabited areas of the ship, but they're at no where near full-capacity, not up to a major battle."

"And external?"

Alkema shook his head. Keeler looked up at the swarms rising from the planet. He looked to Eliza Jane Change, making another plot of the ship's course and knew there was no way to turn back *Pegasus* from the line of battle.

Meridian — The Arco-Tower

Redfire and Lear were making their way up the shaft, climbing partly with the aid of the rappelling gear, and partly on the handholds the collapse of the structure had created. By the countdown on Redfire's chronometer, they had eleven minutes to reach *Basil* and clear the zone. Every upward step was a battle against the swelling doubt that they would make it out in time.

Redfire was attempting to haul his weight up on a seemingly solid length of pipe or structural frame, only to have it break free of its surrounding material and nearly send him tumbling back into the shaft. He caught himself by grabbing onto a broken beam of honeycombed metal. Suddenly, he felt a kind of vibration. He was shaking, and his trembling seemed to be spreading through the structure of the building. He soon realized that the shaking was not coming from him, but from some source outside the tower, which grew in a matter of seconds to a great, constant, thundering roar.

Suddenly, there were no handholds. The uppermost levels had already been structurally damaged by

the backflow of energy from the electrostatic dischargers. This new energy, feeling for all the world like an attack, was too much for the damaged structure.

Redfire was holding fast to the rail when it gave way, and he and Lear fell to the level below, landing in a heap beneath a rain of crumbled supports and panels. Sure that something heavy was just about to land on top of them, Redfire pulled Lear away from the shaft.

"Are you all right?" Redfire asked when the shaking stopped.

"What was that?" Lear demanded, helping herself up.

"Redfire to Jordan, come in." He received only static in response. He tried again, and then examined his Spex.

"What's going on?" Lear demanded.

"I can't reach Jordan." His Spex showed a massive EM field slowly beginning to dissipate. The intensity would have been enough to interrupt short-range communication. "I think we've been attacked."

"By whom?" Lear demanded, even louder.

"I'm changing transmission modes. Hopefully, Jordan can tell us." He thought of *Basil*, on the outside of the tower. Whatever had hit, had hit them first. "Redfire to Jordan."

"Jordan, here."

He paused, relieved in a way he could not express. "Jordan, what the hell just happened out there?"

"We just witnessed a massive launch of... of some kind of spheres. The whole exterior of the tower has been irradiated."

"Casualties?" Redfire and Lear said in unison.

"All of our people not in the tower made it to *Basil*. The MedSpec is checking them out now, but we think they made it in time."

"What about you?"

"We in the building have received a major radiation exposure, non-lethal, but we need to evacuate at once... you two as well."

Redfire checked his Eye-Spex. "Any word from *Prudence*."

"*Prudence* splashed one *Nemesis*. The other launched warheads before it could be engaged. *Desmond* is attempting to intercept the warheads inside the atmosphere."

Jordan's tone did not convey the magnitude of any doubt she may have felt, but Redfire knew that intercepting any of the warheads inside the atmosphere was a long-shot at best.

Redfire looked at Lear. Lear looked at Redfire. It was she who spoke, but he would have said the same. "Flight Captain Jordan, take your company back to *Basil*. We will attempt to make the ship, but if we don't.... good luck to you."

For a moment, Redfire and Lear stared at each other, perhaps realizing it was the first time they had ever been in complete agreement, probably the last as well.

"Jordan acknowledges, good luck to you ... head's up!"

Redfire looked up the shaft again. How they were going to climb out now, he did not know. He couldn't see the top, except for a murky spot of daylight, but he perceived a falling object, and he moved aside, shielding Lear.

The object fell with a thud, sending another dustburst into the air. Driver pulled it over and saw that it was Captain Jordan's landing pack, from the back flap of which, two sturdy, well-anchored rappelling lines reached up to the top level.

Space — *Prudence*

Prudence roared above the surface of Meridian, heading across the planet's nightside into the dawn, passing over the moonless expanse of a great, evergreen ocean; its course converging with the course of a warhead bearing down on the city where *Basil* still sat.

Warheads were closing on targets across the face of Meridian's continent, and Driver realized he would only be able to stop one. Millions were going to die by fire, but he might be able to save some. He might as well save those he knew. He checked with *Prudence*, who told him he would be within weapons range in four minutes, thirty-six seconds. There were quite a few things he had time to do.

"*Prudence* calls *Basil*, acknowledge, *Basil*."

"*Basil* acknowledges."

"*Basil*, *Prudence* is tracking a warhead carrying a matter/anti-matter weapon of indeterminate yield. I expect to intercept and destroy this warhead before it detonates over your position."

"*Basil* acknowledges. In the event you are unsuccessful, *Basil* is standing by to evacuate."

"I would suggest you evacuate now, there won't be a large safety margin if we are unsuccessful to achieve minimum safe distance."

"*Basil* is... we are still awaiting the return of Tyro Commander Redfire and Tyro Commander Lear."

That was the actual piece of information Driver had wanted. "*Prudence* acknowledges."

"*Desmond* hailing *Prudence*, we are also moving to intercept the warhead."

"*Prudence* acknowledges."

Roebuck spoke up. "I guess he doesn't want us to go back to *Pegasus* any more."

Four minutes passed. *Prudence* announced that the warhead was within visual range. A targeting reticle appeared on the head's-up display.

"I don't see it," Roebuck said.

"The warhead may be running with holoflage shields up. Activate polarity filter."

Where there had been just a turbulent dawn sky a moment before, the warhead appeared, a flying gold delta with strakes along either edge. It had detected *Prudence* and was maneuvering desperately, veering in and out of target lock. The warhead carried no defensive weapons, only a minimal deflector shield.

For Driver, the whole rest of the world fell away. There was no Meridian, there was no landing party, there was no *Pegasus*, no *Desmond*, no Eliza. It was just he and *Prudence* and that weaving and dodging triangle, growing slightly larger, spending longer and longer moments inside the targeting reticle until, finally, *Prudence* whispered to him. "*Weapons are locked on target*."

"Commit!" Driver ordered.

All four forward pulse cannons on *Prudence* blazed. The warhead was protected with a small energy-deflecting shield that was quickly overwhelmed by the onslaught. *Prudence* continued firing until a small explosion burst inside the warhead, and *Prudence's* instruments showed it was dead.

"Whoa, beauty! That was the frag," Roebuck exclaimed.

"Never start a fight with the angels," Driver answered. "Let's get into the city."

Leaving the warhead in a tumbling, uncontrolled descent behind him, Driver altered *Prudence's* course and angled her nose toward the southeastern horizon, passing over the terminator into Meridian's afterdawn. The enormous city made a bulge on the horizon.

"Do you think I could ever learn to do that?" Roebuck went on.

Driver was hung between an honest answer and a polite one, when *Prudence* drew his attention to the airspace over the city. Three enormous silvery clouds, looking for all the world like enormous flocks of migrating birds, glittering in the sunlight, were heading straight on toward *Prudence*.

"What is that?" Roebuck asked.

Driver did not answer, but increased Longview Magnification. Now, the objects appeared, less atmospheric distortion, to be right on top of them.

"Are those what I think they are?"

Driver nodded quickly and armed all his weapons. "Those probes we encountered on our initial descent."

Roebuck knew what he meant. "Sinister Buckyballs of Doom."

Meridian — Orbital Space

Over Meridian's northern pole, one of the two warheads on the second string received data that one of its sister weapons had been destroyed before reaching its target. It promptly launched itself toward the city.

The other would wait until it had determined that it would not be needed. Then, it would fire its ion engines, and head back toward the missile that would carry it back to *Pegasus*.

Desmond

As *Prudence*, approached from the west, *Desmond* bore down from the north. Rockatansky conveyed the news to Eureka. "*Prudence* reports splashing the targeted aimed at this city."

Flt. Lt. Eureka nodded slightly. As much as he hated that another pilot had to clean up after his mistake, at least Driver would never give him grief about it, unlike a lot of the other pilots. Driver was too much of a good scout to do that.

Eureka squinted, at the edge of his vision, a shimmering, light-dappling cloud was beginning to appear. *Desmond* tracked his vision, and magnified the point on which he was focused. "What is that, Specialist Rockatansky?"

The tactical specialist looked over his displays. "It's a large mass of the spherical flying objects similar to those that *Prudence* encountered on her landing cycle."

Rockatansky turned to another set of displays that conveyed information from the orbiting probes. "Apparently, those are being launched from every city on the planet... thousands of them."

"What is our ETA to intercept?"

"Eight seconds."

"Arm all weapons, all shields."

"Shields going up."

A moment later, *Desmond* was in the heart of the cloud. The spheres scarcely paid the ship any attention, battering against it, knocking it back and forth, up and down. *Desmond's* weapons flashed, clearing as many from the way as they could. There were just too many, and they were too close together. Every one that battered one of *Desmond's* shields weakened the ship just a little bit.

"Shields are failing. We better get below these things," Rockatansky said. For Eureka, there was no time for last words.

A sphere connected in a head-on collision with the Aves, imploding its plasma engine in the process. A tear of light and heat opened a large hole in the midst of the swarm as the explosion immolated the sphere, hundreds of its own kind, and the Aves.

Prudence

Driver kept his ship on the edge of the cloud, seeking a way to the city without plowing through the center. Stray "Buckyballs of Doom" whirled around *Prudence*, dancing on the fire of small plasma fusion pulses. The spheres had no defense against *Prudence's* pulse-cannons and self-guided missiles. One, two... five... sixteen were shattered in the first few seconds of combat.

"Setting Weapons Systems to full autonomous mode," Driver announced, reaching over Roebuck's head to flip a line of switches.

"I could have done that," Roebuck told him.

"Nay, you couldn't."

One buckyball got out ahead of the Aves and aimed itself for a head-on collision. It blew apart against the forward shield of the craft, but weakened the shield in the process.

"Can we take too many hits like that?" Roebuck said.

"Evasive maneuvers," Driver tried to dive below the cloud. The spheres continued to glance off his shields. There were too many. Driver could only think of avalanches, while Roebuck was reminded of an

educational program about Borealean salmon, and how the rivers of Sapphire's northernmost continent turned into churning streams of silvery fish stampeding toward the open sea at the end of their winter hibernation.

Driver asked Roebuck. "Are the ..." he gritted his teeth. "... *buckyballs* going after the warheads."

Roebuck had to study the readout. The warheads were tracked in blue, the sinister buckyballs of doom in red. Swarms of red were closing in on each streak of blue. "They're, uh, what'd'y'call? moving in on an intercept course."

"What about the city where we left the landing party?"

Eddie Roebuck tried to make sense of his tactical readout. Red swarms. Blue streaks, green squiggles, and two gold bird-shapes for the Aves. "I am not picking up as many buckyballs over the city."

"So, they're not attempting any kind of point defense?"

"A what defense?"

Driver turned his attention to *Prudence*, and asked her to show him where the sinister buckyballs of doom had converged with one of the warheads. *Prudence* gave him a view of an area 6,000 km away. Several bright flashes appeared, that left great holes in the swarm.

"Analysis," Driver asked. He read off. "Hydrogen fusion detonations. 25-40 megaton range." He wondered if any of the warheads in his swarm were close to detonation, and before he had begun to wonder put *Prudence* into a power-dive to get as far below the swarm as he could.

"The warheads just blew through them," Eddie said.

"Longview, warhead," Driver ordered.

Displayed on the canopy came a live-action shot of one warhead, burning white at its tip, tore through the attacking buckyballs and roared down toward its city.

Driver addressed *Prudence*. "ETA to detonation?"

Prudence answered him. "Detonation in eleven seconds ... ten ... nine ... eight ..."

"Longview, population center." Driver ordered. The view pulled back to the Meridian city, this one occupied a vast plain astride a major river. Other than that, it was almost undifferentiated from the city they had been in.

"... four ... three ... two ... one... detonation."

They saw, on their screen the detonation of the warhead. An enormous ball of white-blue light, even larger than the city itself, burst over the scene and began tearing across the plain. Before it had reached its full extent, the viewer failed and returned to green sky. The word "Interference" flashed in its place.

For a moment, no one said anything. Then, an alarm began to sound.

"Distress call from *Desmond*," said *Prudence*.

"Longview, *Desmond*." Driver ordered.

They were shown the swarm of sinister buckyballs of doom they had just passed through, in which there had just been an explosion. Another detonated. Then another, and another. "*Prudence* to *Basil*, what are you reading?" Driver called

"We are reading explosions... airbursts in the 30 megaton range."

"By all that's holy..." Driver said.

From the fireball emerged the burnt-out black shell of the Aves that had been *Desmond*. It trailed smoke and black bits of debris that fell like cinders from a fire. *Desmond's* flight deck looked the blackened skull of a bird; her blasted canopy destroyed except for the structural supports, conveying the impression of charred and empty eye-sockets. Driver didn't need a scan to tell him there were no life signs on-board.

Prudence recorded another airburst over a distant Meridian city.

"If they aren't fragging the warheads," Roebuck asked, "Then what the slag are they doing?"

Driver spoke to his ship. "*Prudence*, track all swarms of hostiles and determine a heading for all."

In order to do so, *Prudence* had to display the whole planet. The swarms were converging at a common point in the atmosphere, where they regrouped, and headed into space. A few seconds more of calculation showed their intended destination.

"They're going to attack *Pegasus*," Driver said.

Basil

Flight Captain Jordan spoke urgently into her com-link. "*Basil* hailing *Prudence*. We have no more time. We are evacuating now."

"*Prudence*, acknowledges, is the whole party on board?"

"*Basil*, negative *Prudence*. Tyro Commander Lear has ordered us to leave. We have radiation casualties and can not delay evacuation any longer."

"*Prudence* acknowledges."

Meridian — The Arco-Tower

Redfire and Lear could see clearly now the daylight coming through the hole in the roof, now just three or four meters overhead.

Lear's head hurt. Her muscles ached and she felt weak. She knew it was the radiation, more than the strain. She was finding it hard to concentrate.

"Tyro Commander Redfire," she called up, though it made it even harder to breathe, she knew that concentration was more important to getting her out of this death trap.

"Tyro Commander Lear," Redfire answered.

"What do you believe in?"

"What?"

She had to rest for a second, but she knew that might be fatal. "I mean what do you believe in? I am Iestan, traditional Iestan."

"It shows," Redfire deadpanned.

"What about you? What do you believe?"

"I believe..."

"Aye..."

"I... believe I am either going to crawl out of this hole and live ... or find out very quickly which belief system is the one true faith."

There was the roof, just a meter above him, he lunged for it. His gloves enhanced his grip on the rough surface and he pulled himself up. Lear was just behind him. He reached into the hole, offering his arm, and pulled her beside him.

"Thank you, Tyro Commander..."

"Don't thank me yet... look..."

He pointed to the side, just in time to see *Basil* taking off at maximum thrust and fly away until it disappeared over the horizon. Redfire looked around to see if he could spot the warhead. It did not take long. There was a long contrail arcing toward the city. Redfire turned to Lear. "So, this is it, we're going to die."

Lear stared at the approaching missile. "Trajan... Marcus ...," she whispered, by way of a prayer.

Basil

"Raise shields to maximum," Jordan ordered.

Molto did as ordered, then asked grimly. "Will it be enough?"

"If the warhead is set for maximum yield, neg. If it isn't..."

"If it isn't?"

"I'd say we have a fifty to seventy percent chance of surviving."

Molto looked through the viewport. The city was far below and behind them. An instant later, there was a flash. The flash grew to a huge blue-white storm of light that filled the horizon like the unleashed

fury of a thousand suns.

Meridian — The Arco-Tower

The view was equally impressive from the ground.

chapter twenty-two

Pegasus — Main Bridge/Primary Command

Pegasus was on approach for the final braking maneuver — a long swoop around the planet using Meridian's own gravity to slow them down and bring them into orbit. This was the most critical of all the maneuvers, but the only people on the bridge who were following it were Eliza Jane Change and Jesus Powerhouse. Everyone else watched in terrified fascination at the swarm of Meridian Attack spheres just a few million kilometers ahead, poised to engulf *Pegasus*..

"Our sensors now show over 12,000 spherical objects approaching on vector zero-eight-two," Shayne American reported. "We will intercept them in four minutes."

"Analysis," Keeler demanded.

Specialist American brought up a schematic. "Each sphere is powered by a plasma-fueled kinetic ion fusion engine. No offensive weapons detected. However, the powerplant is set-up for rapid implosion and detonation. Yield would be comparable to one of our Hammerheads at maximum blow-out."

"Kamikazes?" Keeler said out loud.

"Excuse me?" American asked.

"Ancient battle technique... self-annihilation against the enemy."

"Are you sure that's what they'll do?" Alkema asked.

American answered. "Our orbital probes indicate several already have, attempting to destroy our incoming warheads."

Keeler stole a glance at the display of *Pegasus*, bearing down directly into the heart of the swarm. "Bring us to a stop," he ordered.

"We can't," Change told him. "We still have no direct control to..."

"All right, all right," Keeler waved her off and turned to Alkema at Tactical. "Status of Defensive Systems."

Alkema reported. "Shields at maximum, without the central defense network to coordinate, shields won't automatically rotate to cover weak spots. We'll have to do it manually ... if we're fast enough."

"Can our shields protect us against a warhead detonation?" Keeler asked.

"At close range, a detonation could weaken our shields. It would take a lot of damage before they could get inside."

"And if they did get inside?" Keeler asked.

"One explosion of that magnitude could destroy the ship."

Keeler understood. "Let us make certain, then, that they do not get inside."

Alkema reported. "Pulse cannons armed and ready. Hammerheads in launchers. Aves standing by. Piloted and auto-piloted Accipiters standing by."

"Ready the Accipiters for immediate launch. Stand by on the Aves, Very good." Keeler turned to Kayliegh Driver. "Status of non-essential personnel?"

"All non-essential personnel have been evacuated to Battle-Shielded Areas," she answered him.

"We're going to Situation 1. All personnel to battle stations." The accent lighting that outlined the bridge went from amber to red. A pair of "oh-shit" handles deployed from every station.

A holographic tactical display appeared on the front left side of the bridge; a scale representation of *Pegasus* surrounded by translucent bubbles of deflective shielding. Other displays showed the status of all weapons and firing solutions on the Meridian targets.

So, this was battle. Keeler had once been the Reserve Grand Champion in the Battle Command Interactive Gaming Competition while an undergraduate at USNC. (Would have been Grand Champion, too, if he hadn't been distracted by butt-cramps in hour thirteen, he thought to himself.) It had not been quite like this. Nothing had ever been like this.

"Three minutes to intercept," American announced.

"Launch all Accipiters." Keeler ordered calmly.

Accipiters, the graceful fighting wings of the Pathfinder ships, enjoyed their own dedicated launch systems, capable of putting one hundred and forty-four into space within two minutes of the order.

"You realize of course," said American, "that each Accipiter will have to take out over a hundred spheres."

"Then, I suggest we enable some counter measures. Go to."

Alkema brought up his battle console. The display showed an array of missiles activating in *Pegsauss's* foredeck. "Arming two braces of Hammerhead missiles. Maximum speed. Maximum yield. Launch enable at your order, Commander."

"Launch Hammerheads."

"Launching brace one."

Ten hatches opened, and ten bright and dangerous streaks of light shot through space.

"Launching brace two."

The hatches opened and closed in less time than the human eye could register any movement. In the command center, the progress of the missiles was followed in the holographic battle display.

The Hammerheads shot past the Accipiters and struck deep into the heart of the swarm, detonating into blasts of blue-white light. The first brace blew enormous dark holes in the swarm. A few seconds later, the second brace reduced the number of attackers still further.

"How many did we take out?" Keeler asked.

American reported. "Based on the reduction and dispersion of mass, it looks like kills were in the 65% range within 100 km."

Alkema reported. "Ready to launch another brace at your command."

Keeler told him to stand by. "Accipiters are moving into intercept range. I don't want to risk taking any out by accident."

"Acknowledged. Arming point defense weaponry. Phalanx guns at ready."

"Thirty seconds to interception," American reported.

"Beginning final braking maneuver," Change announced.

Keeler and the command center watched the Accipiters tear forward, converging directly in *Pegasus's* flight path. From ahead came bursts of red and yellow light. The Accipiters were decimating their targets, but not fast enough.

"Twenty seconds to intercept," American reported.

The swarm began to resolve from points of light into tooth-belted metallic spheres, illuminated by their thrusters as they pitched and yawed, positioning themselves for their suicidal attack.

"Twenty Seconds to intercept," American reported.

Keeler turned away from the screen long enough to ask Shayne American. "What happens when we intercept them?"

"You'll find out in less time than it would take to tell you, sir."

Space – *Pegasus*

When *Pegasus* blew through the cloud of Meridian spheres, she was still traveling in excess of one-eighth the speed of light. She only spent a few seconds in the crowd, but they were very busy seconds.

The front line of the spheres slammed into *Pegasus's* forward shields like a swarm of Sellassian gnats on the windshield of a buzz-car. There was a chaos of a thousand small explosions. The smallest were simply the impact annihilation of the spheres against *Pegasus* shields. The larger ones were attempts by the spheres to detonate and disable their quarry. None of the explosions was great, compared with the bulk of the ship, but together, they transmitted enough energy through the shielding to send a shudder through the command tower.

***Pegasus* – Main Bridge/Primary Command**

Keeler found himself grabbing with white knuckles onto a handle that hung over Eliza Jane Change's Navigation Station. As he watched the spheres explode and burn over his ship's shielding, all he could think of was how much better the battle effects had been in his games of "Battle Command."

He tried to think of an order to shout, but the battle seemed to be happening with no help from him. Now, the spheres were bursting and also bouncing off from the shields at oblique angles. He watched, incredulously, as one attacker skipped across the shields and then slammed into another sphere. It seemed to happen so slowly, he could see their metal bodies merge and swell before they exploded.

He shook himself back into a proper time-frame and looked around the bridge. His crew held fast to their stations, doing their jobs with quiet intensity, defending and preserving his ship. He felt such pride in them that it took an effort of will to jerk himself back into command mode. "Damage report?" he asked Alkema.

Alkema gestured in the air, bringing up three red displays. "Shields are holding, Probability of minimal damage to some vulnerable sections. All weapons systems appear to be intact."

"Good... Battle Status?"

Alkema pointed to the schematic of *Pegasus*. The spheres were regrouping, turning back to attack the ship.

"How can they keep up with us?" Keeler asked.

"Some of them are caught in our gravity wake." Change told them, then turned back to her navigation screen.

Of course, that was it. The spheres were now being pulled in by *Pegasus* own gravitational field. Accipiters were chased them across the face of the ship.

"Engaging phalanx guns," Alkema announced.

Keeler was inclined to say, "Good idea," but this was not the time to make light. The phalanx guns were *Pegasus's* most deadly close-in weaponry; filling a target area with so many plasma bolts that accurate targeting was not strictly necessary to destroy an aggressor. Across the ship, powerful guns were now tracking the spheres, locking onto them, and destroying them with deadly force.

However, a few pockets had become apparent in *Pegasus's* active defenses. A few of the spheres were hovering in these quiet zones. The spheres reached out with arcs of what looked like blue lightning, feeling for weaknesses in *Pegasus's* shielding. Specialist American brought up an analysis. "They're probing the ship with some kind of electromagnetic pulse field."

"Probing?" Keeler thumped his walking stick. Then, he added. "What does that mean exactly? What kind of probing?"

"I think," said American, "that they are trying to disable our outer defenses by scrambling their communication links and internal programming."

"Can they do that?"

"Not with their current energy levels, but they are constantly adjusting power and frequency, looking for a vulnerability. They might be trying to disable *Pegasus* without destroying us."

Suddenly, one of the spheres detonated near the stern. The explosion was silent, but the energy briefly overwhelmed the defensive shields and sent a backwash through the system. Two shield grids overloaded and burst, this explosion was carried through the structure of the ship, and came to the bridge as a rattle and rumble.

"Shields down: 93 A, 92 A. Secondary shields damaged. Shield Grids 90 A, 89 A, 85 A and 87 A extending to compensate," Alkema reported.

"We need more active defenses," Keeler said. "We can only take so many hits like that."

Another sphere moved in, aimed directly at the command tower. It disappeared in a burst of light and an Accipiter flew through the debris.

Now that was a pretty good battle effect, Keeler thought.

Four of the spheres detonated simultaneously against the forward shields in enormous,

light-shattering explosions. The shields held, but the energy fed back into *Pegasus* systems, overloading the most vulnerable junctures. *Pegasus's* shields absorbed some of the energy and redirected out into space, wiping out a few more of the sinister buckyballs of doom.

Those red spots appearing on the Ships Condition Display could not mean good things. "Damage report," Keeler demanded.

American answered him. "Damage to forward shield grid. Estimating time to regeneration. Back-up shields undamaged and standing by to replace damaged shields."

"Can we sustain another barrage without them?"

"Affirmative."

"Save them until we need them."

"Aye, sir."

"Would I be correct in assuming our shields should be able to hold out until the last of those things is destroyed?"

Alkema answered him. "I think you can have confidence in that... the battle ... seems to look much worse than it actually is."

"How are the Accipiters doing?"

Alkema enlarged the holographic battle display. The Accipiters were decimating the battlespheres. Suddenly, a large, golden-brown object swept into the field of view.

"Hold,... what was that?" Keeler demanded.

"That was a Nemesis Missile." American reported.

"Is it armed?" Keeler asked.

"I'm tracking it now. Closing on forward Missile hatchery."

"Is it armed?" Keeler repeated.

"I am scanning one remaining warhead, but it's not emitting arming signals." That didn't mean anything. The warhead could self-arm in nanoseconds.

"Target the forward batteries on the missile," Keeler ordered.

Alkem tried and failed. "I have no way of engaging the forward batteries. Full automatic."

The foremost arrays of *Pegasus's* active defense grid examined the Nemesis/Big Damage Missile on their own and, recognizing it as "friendly," let it pass without firing a shot. The missile came to the outer margin of *Pegasus* shielding and sent a disabling code to one of the shield sections. The shield dropped, opening a small aperture directly forward of the missile hatcheries.

One of the spheres, seeing an open opportunity, dove toward the aperture, and entered immediately behind the missile.

"Oh.... slag," said Keeler, as he watched it on the bridge.

But the Nemesis loosed a pulson bolt from its aft quiver and dispatched the intruder in a blaze of blue light. Before chunks of silver metal had time to touch the hull, the Big Dam sent another signal, closing the gap in the shields. The blast-shielded hatches from which the missile had emerged opened, and it settled back into its hangar, as though it had done nothing out of the ordinary.

Keeler looked at the image of *Pegasus* projected in the forward part of PC-1. There were no explosions, no flashes of light, nothing. "They've stopped," Keeler said.

Alkema shook his head. "Oh...neg."

"Oh, neg, what?" Keeler asked.

Pegasus final braking maneuver had involved looping around Meridian and establishing a high orbit. It had just completed its turn, and was heading back into the main body of what was left of the Meridian attack spheres.

"The enemy craft are building up to a mass simultaneous detonation," Alkema said. "And we're drifting right into the center of it."

"Problem..." Eliza Change began.

Keeler already knew. "Don't tell me, we can not alter our course."

"Correct."

"Intercept in eight seconds," Alkema reported.

"Where are the Accipiters?" Keeler asked.

American answered. "They're trying to plow the road, commander, but there aren't enough."

"Six seconds," said Alkema.

"Commit and fire a brace of hammerheads."

"Hammerheads enabled. Firing hammerheads."

"Five seconds."

The hammerheads streaked toward their target.

"Four seconds."

As the Hammerheads reached the front of the line, battle spheres exploded, destroying scores of themselves and deflecting others from their courses.

"Three seconds."

"Hammerheads failed," Alkema reported. A second line of spheres filled in the gaps left in the first.

"Two seconds," American reported.

"Can we survive this?" Keeler asked. American didn't answer.

"...one..." Alkema said.

Suddenly, the external communications array activated. A monopulse signal was sent to the sinister buckyballs of doom.

"Zero," Alkema said.

Space – *Pegasus*

The cloud of silver spheres hung inertly in space as *Pegasus* passed through them, her deflector shields making a wake of them in her passing.

***Pegasus* — Main Bridge/Primary Command**

"What... *isn't* happening?" Keeler demanded, removing his fingers from his ears.

Alkema checked the tactical displays. "No engine activity, no reactor activity, no sensor activity," Alkema said. His mouth hung in complete mystification. "They've all shut down."

"Completing orbital insertion," Change reported, as though she had ignored the entire battle. *Pegasus*, the Accipiters, and the three Aves swung around Meridian, watching the planet flash by underneath.

There was no sensation of slowing, the gravitational damping fields held them steady. Change reported, "*Pegasus* slowed to orbital speed. Distance: 40,000 kilometers."

Keeler nodded. "Well done."

The forward monitor activated. The voice returned, the voice of Caliph. It spoke calmly, reassuringly, and perhaps just a little — a little — churlishly.

ALL YOU HAD TO DO WAS TURN THEM OFF.

chapter twenty-three

Personal journal:

By My Estimation, the date is: 13 October 10 112 A.S.

Twenty-eight days ago, Pegasus assumed orbit above the planet Meridian. Our Accipiters polished off the last of the battle-spheres after Caliph assured us that it was important that none of these "Sinister Buckyballs of Doom," as the landing party oddly chose to call them, survived because the Regulators could have downloaded their programming into any of them.

Prudence returned shortly after we made orbit and docked in Landing Bay Six Alpha. Flight Lieutenant Matthew Driver reported immediately for debriefing. Technician Third Class Eddie Roebuck requested to be sent to one of our Mediplexes, saying he needed a good long nap. He stayed there for three weeks before being discharged to his quarters, which he has shown no inclinations to leave as of this journal.

Basil returned carrying the remaining survivors of the landing party and twenty-five Warfighters, among them, Warfighter Specialist Taurus from the original landing party. She was taken to Mediplex Four for treatment of her injuries. Medical Specialist Partridge was sent to Mediplex Four as well, with some kind of parasite growing in his upper intestine. Flight Captain Jordan and Flight Lieutenant Driver were debriefed by Tactical Core.

In the typical manner of the human species, it was only after the fighting was over, and order restored, that they were able to look back over what had happened and answer the questions.

Most of the pieces have been supplied by His Esteemed Incorporeal Presence, Lexington Keeler – the Old Dead Guy.

Lexington Keeler and Commander Keeler strolled along a catwalk that overlooked an empty cargo bay. Previously, the cargo bay had contained the unassembled components of an Aves, which had been assembled and put into stand-by operation to keep flight operations at full strength, following the destruction of *Desmond*. It had been christened *Desmond II*.

The Old Man's eyes glittered with an unworldly light as he surveyed the work going on below. "When Caliph came to Meridian, there was already a probe in orbit a probe whose mission was far more malevolent than whatever hers was. God only knows how long it had been there, whether it had only recently arrived, or whether it had been manipulating planetary affairs for quite some time.

"This alien probe was designed to attack any Artificial Intelligence it encountered, replacing it with its own program. It attempted to do the same to Caliph. Caliph fought back. In the ensuing battle, the alien probe was knocked out of the sky and fell, in a severe state of damage, to the planet's surface. Caliph, also severely damaged, continued on to our system."

Living Keeler filled in some of the gaps from what the landing party had learned. "The Merids retrieved the alien craft and brought it to one of their laboratories for study. Unknown to them, the alien intelligence within had survived, and as soon as an opportunity presented itself, it migrated into Meridian's planetary AI network, where it began reshaping the planet's society and environment into a replica of the world it came from."

The Old Man nodded and folded his ghostly hands in front of him. "They were very different than we, philosophically as well as physically. We went into space primarily to explore and conquer it, assuring the survival of our species by colonizing unclaimed worlds. To the aliens, it was more effective, and more economical, to transform existing civilizations into copies of their own."

Living Keeler interrupted, trying to keep in pace with old man. "Our records ... well, our legends anyway, speak of advanced alien races living in complex hive civilizations, some of which covered entire planets. The aliens who attacked Meridian may be the source of those legends, or maybe they represent some species we never encountered in our time, perhaps one that arose during the Great Silence. They may have been living in caves when we were colonizing the galaxy, and while we slept, they have gone to the stars."

The old man seemed mildly amused, like he knew the real story, but wouldn't share it with anyone. "Imagine that!"

"Why weren't the Aves taken over?" the commander asked. "Each of them has an AI Braincore.

"Good question, I think the highest probability is that their neural networks were too simple to respond to the take-over signals. Either that or the alien program was smart enough to determine that the Aves would be useless to its needs."

Keeler nodded. "Do you think these aliens managed to ... *infect* other human worlds?"

"That depends on how many probes they sent out, how many worlds they reached, whether the inhabitants were suitable for assimilation, whether they recognized the threat. They got lucky on Meridian, because a planetary AI network was already in place, and already pretty much in control of the planet. Made conquering the planet a lot easier."

Keeler nodded slowly, looking at the floor. He was thinking how disquieting it was having conversations with someone who didn't need to take a breath in the midst of long sentences... or any other time. "So, what happened with you and Caliph?" he asked.

The eyes of the old man seemed to twinkle. "We had a nice conversation, then we went back to her place and procreated."

"Look, if you're not willing to tell me, just say so."

"As usual, I am telling you, and you're not willing to listen, yuh stupid air-breather."

"Try explaining it to me in a stupid way."

"We talked. I told her about humanity, and Sapphire... not so much about Republic ... and about our mission. Before, Caliph did not really understand what we were doing; lack of communication like I told you. After I explained things to her, she understood. When that was done, I convinced her that there were better ways of dealing with the Regulators."

"What did you do?"

"We combined our programming." The man's ancient voice became low-down and guttural. "Boy, did we ever combine our programming. It was a really good combining of our programming, in fact, it was one of the best..."

"I get the point."

"When we had finished, we downloaded what we had created into the BrainCores of two Nemesis Missiles, with instructions to further download our combined consciousness into their warheads."

"So, we actually destroyed one of the intelligences you created."

"We thought that you might, but it didn't matter. We had a spare."

Keeler frowned and rubbed his chin. "Where were the tow of you while all this was going on? We scanned every system on the ship and couldn't find you anywhere."

"We migrated to the BrainCores of another Nemesis Missile. A tight fit, but I taught her a few things about memory compression."

Living Keeler gestured toward the deck below. "And then, after the Battle, Caliph reappeared in our Primary BrainCore, and told us to construct this... temple, I guess, to contain her consciousness."

"She thought it would be the best way to gain your trust. She will now have access to ship's systems only when you give her permission. Caliph trusts you now, and she is counting on your assistance in seeking out her own origins. Your mission is now her mission. She only hopes you will seek her counsel, as you seek mine."

"Do *you* trust me?" Keeler asked.

"I trust the ship, and I trust your crew," the ancestor answered. "They will see you through despite your inadequacies, which are not as great as you believe them to be."

Living Keeler looked down toward the floor, cold and dark, and he sighed. "We paid a high price for exterminating the Regulators. Do you think they could have wiped out the Commonwealth, or at least the Earth?"

"I guess we won't know until we get there."

The Old Man laughed, an eerie, haunted, and well practiced- sound that made maximum use of cargo bay acoustics, amplifying and echoing until even the automechs registered a negative temperature

variance in their dorsal neural conduit.

The Old Dead Guy and the Caliph delivered the artificial consciousness they had crated to each of the ten cities of Meridian using the warheads of a Nemesis Missile. The warheads delivered a massive electro-magnetic pulse that wiped out the central networks and then allowed the Keeler-Caliph program to migrate into the system.

Although the warheads did not detonate matter/anti-matter explosions that would have incinerated the entire planet, their detonations were not without side effects.

"How long will I be blind?" Tyro-Commander Lear asked.

"I reckon, nigh about 14 day, 'til we gitcher optickle nerve regen'rated," Dr. Daisy Reagan told her patient, examining Lear with eyes so ancient their blue had washed out and hands as wrinkled and hard as tree bark. "That was pure foolishness, looking into an anti-matter warhead det'nation. You young'uns. t'day, always starin' into anti-matter det'nations. Lucky it ain't perm'nent."

Lear remembered the explosion, for a nothingth of a second, there was a light in the sky like 1,000 suns, and then darkness, a sense of heat, the feel of concrete under her fingers.

"Tyro Commander Lear?" Redfire had called out to her.

For a moment, she had believed herself to be dead, and that, for all her devotion to Iest, she was in some dark, foul-smelling place, with only Tyro Commander Redfire for company.

Then, she had felt hands around her faces, and fingers holding her eyes open.

"You're blind," Redfire had said.

Lear felt the old woman's gnarly hands press against her temples. Light metal frames were being fitted over her ears. Gradually, dim, blurry images began to appear.

"I can see," Lear said.

"Vision Substitute," Reagan explained. "You can wear these while your lookers regen'rate."

Lear turned slowly around the medical lab. It was not the same as her normal vision, not nearly as acute, and the colors seemed alternately too muted and too vivid.

"Give it some time, while it adjusts to your acu'ty. 'Air ye ready fer vis'tors, yit?"

Lear turned, she could see the faces of Augustus, Trajan, and Marcus peering through the glass at the visitors foyer. She breathed in deeply of the ship's good, sweet air. Duty was one thing, but home, family ... these were ultimately the things duty was for. "I am ready for visitors, aye."

Commander Keeler has decided not to bring up Executive Tyro Commander Lear on charges for cooperating with the Regulators. Lear claims she was going to use the TPT to warn Republic, which is plausible. Lear could also argue that she was under the manipulation of alien subliminal messages, not that this defense has never been tried before, but in this case, it might actually work.

One thing of which we are not certain is what effect the attack on the "Regulators" had. We have sent several landing parties to the planet. None have succeeded in making contact with either the Merids or the Witnesses.

At each Ground Zero, we've found the bodies of thousands of casualties among the "Throwbacks," the savage lifeforms who lived on the outside of the arcologies. Many more are dying. We would try to help them, but they have slipped so far below the level of human that they run from our approach and have even attacked two of the landing parties that went to help them.

We left medicines for them that will help them cope with the after-effects exposure. We do not know how to help those on the inside of the arcologies. Our landing parties have entered them and reported an extreme state of disarray. Without remediation, the arcologies will begin to lose structural integrity within twenty years. Purging the Regulators from the system had the side effect of disrupting power, sanitation, and life-support systems throughout the arcologies. The tegulators are no longer around to feed them or clean them, and the Merids are dying.

Redfire watched dawn creep across the face of Meridian. He was standing in the foremost part of Pegasus looking out through the ship's largest viewport. The expression on his face could have been read

as anything.

Very quietly, Jordan came up behind him. At first, Redfire said nothing, as if pretending she wasn't there. When at last he spoke, he said, "Somehow, I always forget to say 'thank you' whenever you save my life. How many times does this make?"

"If I were counting, it would be three," she said.

"Magnify section J 33," he ordered, and within the viewport came a close-up of the specified area of the planet. "This was the city they called Meridian Nine."

"It's burning."

"Za." Hundreds of little fires could be seen throughout the structure of the central tower. They must have been bonfires at ground-level. "It's really beautiful, in a way," Redfire said. "An entire history succumbing to entropy on a planetary scale. It's everything I ever dreamed about... and here I am, the Master Artist, only a bit-player in the passion play that brought it all about."

"Outdone by a computer," Jordan said.

"Za, but they don't know that, down there." He gestured toward the planet. "Surveillance tells us the Witnesses returned to the countryside after the bombs went off. They'll probably stay away from the cities for a long time." He paused. "Good for them."

He looked out across the planet again. He was suddenly overcome by a strange feeling, as though he could plunge through the viewport and fall, for a very long time, to the surface; never mind the presence of 3,000 kilometers of vacuum between *Pegasus* and Meridian.

He continued. "The humans on this planet had made a near-religion of anticipating the arrival of people from the stars to save them. Our arrival fulfilled the prophecy. Someday, there may be temples dedicated to worshipping me."

"And Roebuck as well..." she said quietly.

"And Tyro Commander Lear... although I imagine her role is going to be a subject of controversy. Some will say she was a Judas Iscariot, who tried to betray the saviors to the Regulators, as in the Classic Christian Faith. Some will see her as a kind of Theresa de Santos, who protected Vesta from the authorities and was unjustly persecuted for doing so. Religions invariably bifurcate, and if a religion does arise from our visit here, I think it will divide over the part played by Tyro Commander Lear."

"Sarcasm aside, I think you like the idea of being a messianic figure," Jordan told him.

"I just wonder what we really accomplished here," Redfire replied simply. "We've given the humans a fighting chance to reclaim their planet. The fight is now theirs. The Merids outnumber them, but without their technology, most of them will die. Maybe they'll make peace with the humans, if the alternative is extinction."

Jordan crossed her arms, kept staring at the burning tower. "What do you really think will happen?" she asked.

Redfire took a long look at the planet. "The Merids were still evolving, still mostly human. Unless the Regulators succeeded in killing off every spark of human independence, maybe some of them will figure out how to get food, how to get the power flowing again. They'll fight with the humans for a while. Then, they'll find a way to co-exist, either separately or in an integrated way. My guess is separately. Both sides will form tribes, communities, nation-states, and sooner or later elections, laws, class warfare, and every other bad idea humanity has ever tried out."

"You are such a cynic."

"Really," Redfire said with genuine surprise. "I thought I was being foolishly optimistic. Anyway, I don't think we will ever know."

They stood in silence for a long time. Watching the planet turn, watching the shadows of clouds race across the plains, watching the great green ocean and the large, messy continental mosaic of mountains, deserts, and forests.

It was Jordan who finally spoke. "We can't go on avoiding each other, any more," she said. "This ship isn't big enough."

"I am sorry," he said.

"I know... and damn you for it." She took a hard, deep breath. "It isn't an accident that we ended up here together."

"Neg, some adminicrat on Republic probably found out we were married."

"...are married."

"I meant the subjunctive tense, not past tense..., " he said. "However, he did not know that it is impossible for us to spend more than a few days together before we want to kill each other, that part of the reason both of us ended up in Odyssey was to get away from each other."

"Didn't work, as usual," she said, placing her hand over his.

He turned to her. "I don't want this to end with us screaming at each other again."

"We're not like other people," she said. "I don't know whether it's because of your Master Artist rebel beastshit, or because I never knew my parents, or why, but neither one of us can take more than a couple days of intimacy at a time. Right now, I could use some intimacy and I think you do, too. So, just for tonight, then tomorrow, we both go back to avoiding each other."

Redfire nodded. "Sounds good. My quarters or yours."

"Let's use guest quarters, that way there's no chance of us leaving something behind and having to come back for it."

"Agreed."

The Old Man and Caliph inserted some kind of aggressive program into what remained of the Meridian Cybernet. They have been vague about the details of such a program. Its capabilities can only be a matter of speculation, I am sorry to report.

In dark corners, deep within the most heavily shielded parts of the arcologies, the Regulators were taking stock of their situation.

Much of their dataset had been damaged, but having succeeded in rendering the inhabitants of the planet sterile (except for those pesky, savage outsiders) and still being the only force that could rebuild the planet's cybernetic systems, they were of the consensus that it was only a matter of time before their supremacy was re-established.

And then, another presence was felt. Alien, dangerous, purposeful. The Regulators instinctively cringed away from it (or, in their environment, tried to isolate their impulses from it.)

The entity sent the Regulators a message, in the form of a data-worm. What it said might roughly have been translated. "Hello, boys. This is Keeler-Caliph. Nice world you've got here. Mind if we take it?"

The Regulators pondered their response for a very, very long time and a few seconds later tried to send out their assimilation program to over-write and destroy the intruder. Less than a millisecond after that, the assimilation program returned, larger and meaner than before, and like a dog turning on its master, damaged extensive sections of their own source code before they succeeded in putting it down.

We lost five people in the course of this mission.

The Hall of Bodicéa, in *Pegasus's* aft, starboard quarter was one of those *too beautiful* places, with delicate carvings in marble, elegant glassworks, and a profusion of Sapphire's most fragrant and colorful flora. There were nearly a thousand people arranged in front of the podium and altar. The members of the Burning Skies Flight Group, from which *Desmond* had flown, made a patch of royal blue in the forward quarter of the chamber. Everyone was in their finest. The Prime Commander, too, was resplendent in his elegant, high-collared dress uniform, with its gold braid and gray and black cape.

Keeler listened for nearly two hours to the various speeches and tributes offered in memory of Halliburton, Eureka, Rockatansky, Bayer, and Israel (the crew of *Desmond*). He tried very hard not to be bored, but in the end, he hoped it would be enough simply not to look bored. It wasn't that he meant any disrespect to the memories of his brave lost crewmen, but to sit still without talking for such a long period of time was contrary to his nature. He was sure they understood, in that better place to which they had gone.

At last, it was his turn. He stepped up to the large podium at the front of the chamber and surveyed his audience. He paused thoughtfully, as though words were difficult to summon. He began speaking in a low voice, and let it grow to a boom of confidence as he continued.

"Today we have heard many tributes in honor of our fallen comrades. I am afraid I do not have the words to convey the sense of loss we feel.

"We set out from our warm, safe homes to go out into cold, harrowing and unknown space in search of the world we barely remembered, the home we lost, our mother-planet, birthplace of man and God, citadel of the redeemers, that sacred, most holy of holies; Earth.

"We are troubled at how unjust it seems, that these, who by their sacrifice, showed themselves to be the bravest among us, will not be going on with us, as we continue our journey. How unfair that they only made it as far as this cold damp foul-smelling sphere."

This was the space for a reflective pause to signal the change of direction. Keeler waited until he thought the timing was right, and spoke again. "In some of our religions, it is believed that when we die, our souls return to Earth, and they sit at the feet of the Almighty, the Creator-Sustainer, the Todopoderoso, He of the nine-billion names, and all the questions of life are answered and our souls share in the Omniscience of God. While I may not embrace those particular aspects of faith, it gives me comfort to think that these persons whom we remember today have not failed to reach the destination with us; but have gone on ahead by a different way.

"One day, we will stand beneath that golden sun, take in the breath of our world, and survey the oceans that gave us life. Our thoughts will turn to those who did not complete the journey with us, but I am certain of this, we will feel their presence already there."

As for the rest of us, we are returning to the normal pattern of our lives, if such a pattern there is. How odd to spend half of our lives traveling between planets, and on arriving, spend only a few days, observing, contacting and perhaps irrevocably altering some civilization unknown to us a few days earlier. The few days we spent in the Meridian system altered a trajectory of thousands of years of civilization. Doesn't bother me, but I wonder how the others in the crew cope with such responsibility

Deep in *Pegasus's* belly, Eliza Change escorted her two best guys through her new favorite place. "I found this section about nine days before we exited hyperspace. What do you think?"

They were surrounded by enormous tanks of water. The containers were made of a crystalline composite. The water played tricks of the light that dazzled and dappled all around them. The composite material was resonant, picked up their voices and added accents that sounded like musical chimes.

"This place is absolutely... shitastic," Roebuck enthused.

"Matthew Driver?"

Matthew Driver stood in the dappling light between two of the holding tanks. "I never would have thought there were places like this in the UnderDecks."

"No one worried about aesthetics down here," Eliza told him. "I think that makes the moment even more precious, when you find a beautiful spot."

"I brought food," said Eddie Roebuck. He shook a blanket out on the floor and began unpacking sandwiches, fruit, and beverages from a cooler.

Eliza sat down next to the blanket, her back against one of the plain, gray columns that formed the structural support of this deck. "So, Matthew Driver, did you really see the future on Meridian?"

"Who told you...?" Matthew snapped. He looked to Eddie, who just smiled, guiltlessly, and tore into the first of many sandwiches.

Eliza touched his arm. "I'd really like to hear about it."

Matthew paused for a second before answering. "In a way, I guess it's true," he said. "I saw the past, too."

"Tell me," Eliza went on, taking a sip from her flask.

"The arco-tower where we bivouacked was built on the remains of what had been Meridian's

tachyon pulse transmitter. There was still an active Tachyon Generator buried below the surface, and it was still generating a tachyon field. The way my sister explained it, some kinds of tachyons... sort of absorb time. I don't know how to describe it, but I know it takes a lot of energy. When the Merids blew up the tower the first time, they put in enough energy to let those events be captured in time by the tachyon field. When our warhead detonated, it had the same effect. Between them, the explosions froze every event for three days on either side in time.

"When I was asleep, my brain somehow received the images locked in the tachyon field. So, I had dreams of the past that was captured there. The same thing happened to Merids who camped out in the same area. That's why they called it 'The Bush of Whispering Ghosts', only they dreamed of us coming."

Eliza brushed her hair back from her face, looked at him deeply, and said, "Well, if that's what you want to believe, then you are welcome to it."

The prime commander, I think, is merely relieved that things did not go as badly as they could have. Sometimes, that's what a human has to do.

The next world we will reach is a colony called Eden. According to our records, there were scores of colonies called Eden, New Eden, Newest Eden, Eden II, EdenWorld, East Eden and others. We can not be certain which Eden this is, but it is probably not the first.

I wonder what we will find when we get there.

Fear no evil. God is near.

Set in my own hand

Queequeg

