## THE VOID

## Michael McCollum

End of the world stories are very popular in science fiction. If only the problem was that small!

Captain-First-Rank Tessa Hallowell stood before the mirror and cast a critical eye over the black-and-silver uniform that hugged her svelte form. It was not vanity that caused her to switch the mirror camera from viewpoint to viewpoint, but rather a desire to make the proper initial impression on her newly acquired prisoners. The war council had entrusted her with one of the most important missions of the impending attack and she was determined not to fail them in the slightest detail.

Having assured herself that her uniform was spotless and wrinkle free, she turned her attention to the body within. The face was pretty enough, she supposed, with high cheekbones and a mouth that fell too easily into a pout. Her eyes were her best feature, emerald green and expressive, but as hard as diamond when she wanted them to be. The blonde hair was cut short in order not to interfere with the helmet seal of her space armor. The body was muscular, without being manly; properly curved, but without the excess flesh that some men found attractive. There were many planets in the galaxy where Tessa Hallowell would be considered beautiful—and, of course, an equal number where her large framed blondeness was little more than a curiosity.

She smiled as she scanned the mirror one last time. At 28, she was the youngest captain in the fleet and only one of two women commanding starcruisers. It had taken a great deal of effort and not a little political maneuvering to achieve her current status and everything she had worked for was about to culminate in triumph.

Finished with her inspection, she called out, "Yeoman!"

"Yes, Captain?" came the immediate reply from the overhead speaker.

"Have my gig made ready. I'll go over to the observatory now."

"Aye aye, Ma'am."

She picked up the anachronistic helmet that the Hegemonic Navy had adopted for its official headgear and strapped it on. Moments later she was striding purposefully around the main circumferential corridor of the busy star cruiser, acknowledging salutes from the crewmen she passed. The salutes were as crisp and perfect as any to be seen at the Galactic Guard's academy on New Rome, an indication that her pride was shared by those who served her. Two corridors later and a quick fall down a dropshaft brought her to one of the bays where they kept the auxiliary craft.

The gig launched into the great blackness less than two minutes later. As they cleared the cruiser, Tessa glanced up and suppressed a sharp intake of breath as the galaxy came into view. From her current position some ten thousand light years above the plane of the galaxy's equator, the Milky Way was a vast river of subdued fire frozen against the utter blackness of space. The great pinwheel was so close that it seemed three dimensional, yet sufficiently distant that its foreshortened spiral form was easily discerned. Next to the galaxy's glory, the other patches of light in the ebon sky dimmed to near invisibility.

The Hegemonic Fleet Starcruiser Warwind had been six thousand hours in transit to reach her objective

located high above the galactic spiral. For two-thirds of a standard year they had slipped upward from where humanity's million-plus stars floated among a hundred billion unexplored brethren, climbing nearly to the halo of ancient blue suns that englobed the flattened disk and bulging central mass of the galaxy.

Warwind's objective was the Extragalactic Tachyon Observatory, the largest and most costly observing tool ever created by human beings. For a starship to approach the universe's premier tachyon instrument by stealth required careful piloting and not a little luck. For eight long months, Warwind 's crew had monitored the superlight communications bands, searching for any hint that the observatory had noticed the tachyons that streamed continuously out of their ship's engines as it climbed ever higher above the galaxy. For all of that time, Tessa Hallowell had lived with the tension brought about by fear of discovery, tension made worse by the knowledge that it would only take but a single warning to alert New Rome and ensure the destruction of the Hegemonic fleet.

Nor was lack of an alarm necessarily evidence that they had not been spotted. Even in these non-military times, a great deal of comm traffic was in code--whether originated by computers, diplomats, or merely commercial concerns eager to keep their monied secrets. Also, the warning could have been disguised, either as an innocuous message or by being buried in the astronomical data the observatory transmitted back to the galaxy round the clock. A single nanosecond pulse was all that was needed to send the Galactic Guard streaming away from their bases and toward the worlds of the Hegemony.

After eight months of worry, action had come as an anticlimax. *Warwind* had closed to within a hundred thousand kilometers of the great observatory before launching her strike boats. Her marines had grounded on the hull without incident and then proceeded to break in at a dozen different places. They had been met, not by armed defenders, but rather by a staff more bewildered than resisting. The sheep had submitted meekly as soon as they found armored wolves in their midst.

With surprise total and her victory complete, Captain Hallowell had sent the coded words so ancient that few knew the language that had originated them. "Tora, Tora, Tora," had whisked toward Hegemonic Headquarters on a beam of modulated tachyons, to be instantly responded to with, "Make your preparations, but hold for orders. H-hour is imminent!"

Suddenly, a tiny sphere appeared in the great blackness before them. With the galaxy at her back, it seemed lost in an empty ebon sea. It expanded quickly and turned into a large habitat globe, almost mundane in its ordinariness. There were literally tens of millions of these islands of hospitality scattered throughout human space. Most orbited yellow suns that emulated (to a greater or lesser degree) the warm glow of Father Sol. Others bathed in the ruddy rays of great stars the color of old coals, or flashed with the actinic blue-white of nature's supergiants, or orbited close to many of the universe's countless midget suns. Still others floated where every star was a dimensionless pinpoint and only the most sensitive instruments could detect the pull of distant gravity. The standardized habitat modules were used wherever men and women found themselves enveloped by vacuum. Out here there was nothing to reflect off the white hull save the suffuse glow emanating from the Milky Way. Even so, the contrast with the black backdrop and its myriad faint smudges of light made it seem as though the habitat globe was illuminated by some internal fire.

The habitat was only the most visible portion of the observatory. Dispersed across a billion kilometers of surrounding space were the sensors that collectively made up the tachyon "array." Invisible though the sensors were, they were the reason Tessa's ship had been dispatched to this distant outpost. Here, high above the galactic swirl, conditions were nearly perfect for "seeing" the superlight particles created in the nuclear fires that burned at the heart of every star. Out here where space was virtually flat, where cosmic gas and dust were nearly nonexistent, tachyon astronomers could watch the universe in real time, unfettered by the snail like crawl that is light speed.

Nor were they limited to observing natural phenomena. The engines of starships burned bright with waste tachyons that were instantaneously flung toward the farthest reaches of the firmament. Like their sublight cousins, the neutrinos, tachyons were virtually unaffected by passage through normal matter. Thus, starships appeared as tiny moving stars to the great instrument at the edge of the galaxy. It was the tachyon telescope's ability to track ships that had caused the Hegemony's high command to dispatch *Warwind* to this most distant of all humanity's installations.

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The space gig floated through the observatory habitat's main ship lock and was immediately winched to a tie down pad within the large cylindrical hangar bay. As soon as the gig was secure, its flanks were buffeted by a hurricane of expanding air as atmosphere was released into the bay. Tessa unstrapped and floated toward the midships airlock.

Sergeant Major Cochrane of *Warwind* 's marines waited in the hangar bay with a small squad to welcome his captain. Despite the lack of gravity and his space armor, Cochrane managed to look as though he were standing on the parade ground back at headquarters.

"Situation report, Sergeant Major!"

"The habitat is secure, Captain," the sergeant's amplified voice said from somewhere around his belt. "We control communications and are continuing to transmit routine messages and scientific data. We have rounded up the observatory staff and have them in the messhall, all except the headman. He's waiting for you in his office."

"No stragglers?"

"No, ma'am. We tapped into their roster and have them all identified by face and retina scan. There are twenty-eight of them. Ten scientists, twelve assistants, and six housekeeping and maintenance types."

She nodded. It would be even more crowded aboard *Warwind* on the return voyage than on the outbound leg, but that could not be helped. A warship was not a liner. Even with every free bit of cubic crammed with food and other consumables when they had launched; this voyage was straining their resources to the limit. They would naturally restock from the observatory's supplies of foodstuffs and oxygen, but even so, by the time they returned to the galaxy, ship's crew and prisoners would be on short rations.

"What is the name of the head astronomer?"

"Senior Academecian Trevor Vannick, Captain. I must warn you that he is not a happy individual."

"Did he resist when you captured him?"

"Other than cuss us out in about four languages? No, ma'am!"

"Conduct me to him."

"Yes, ma'am."

Cochrane gave a silent order over his helmet commlink and his party immediately assumed convoy positions. Tessa grasped Cochrane's equipment harness and let him tow her toward the axis hatchway using his suit's maneuvering thrusters.

The habitat's interior was as nondescript and common as its exterior. Here and there, the inhabitants had

attempted to personalize it with pictures and potted plants. Like all such installations and every ship of space, the place smelled of people and machinery forced into too close proximity.

Academician Vannick's office was just one hatch out of many that lined the outer curve of the main equatorial passageway. It would have been indistinguishable from all the others save for the two *Warwind* marines who flanked it. The hatchway retracted into the bulkhead at their approach, and Tessa pulled herself hand over hand into the office beyond.

Vannick was cadaverously thin, with wisps of white hair that floated akimbo in microgravity. He glanced up as the hatch opened and watched his captor make her way to the anchor frame in front of the desk. There was a look of barely controlled rage on his face.

"Are you the leader of this band of hooligans?" he demanded as she wrapped her legs through the anchor frame.

"I am Captain Tessa Hallowell, commanding Hegemonic Star Cruiser Warwind ."

"You're from the Hegemony of Stars?" Vannick asked, incredulous.

"I am and you, sir, are my prisoner."

Tessa could see the astronomer's expression change as he processed this new bit of information. The Hegemony had begun life as little more than a regional lobbying group, an association formed by the new, raw star systems at the fringes of human space to blunt the influence of the older, more civilized systems that clustered around ancient Sol. There had been talk of secession for generations. Lately the talk had turned serious. To find himself face to face with someone who claimed to represent the navy of a sovereign state told Vannick that the political situation was far worse than the news reports from New Rome indicated. The Communion of Humanity, with its capital at New Rome, had not had a competitor for almost 200 years, not since the Antares Republic had submitted following a brief, bloody war in the 28th century, in fact.

"The Hegemony has seceded?"

"It is I who ask the questions here, Professor," Tessa said coldly. Onboard her ship, such a response would have halted all protest instantly. Rather than quiet the astronomer, her rebuke only drove him to fury.

"Goddamn it, have you people seceded?"

Tessa frowned and made a conscious effort to hold her temper. In general, scientists did not respond well to authority and her greatest need was for a quick, orderly evacuation of the station. She made a quick calculation that she would complete her mission most expeditiously with the appearance of being reasonable. There would be plenty of time later for the professor and his people to learn who commanded.

"Not yet," she answered with deceptive calm. "However, military action to bring about a situation where we can declare our independence is imminent."

"You can't! This is the worst possible time..." Vannick's protest died in his throat. A new, horrible thought had occurred to him. "What are you people doing here?"

"My fleet will soon be in action against the Galactic Guard. I have been ordered to ensure that the *gigi* 's do not use this observatory against us."

"How could they possibly do that?"

"With your sensors, you can track ship movements. That is a capability the guard will find most useful after the commencement of hostilities."

Vannick's response was a rude noise.

"Do you deny that your instrument detects starships?"

"No, of course not. Interference from ships moving *ftl* often corrupts our data. In fact, we do everything in our powernot to detect your precious ships."

"But you could if you wanted to?"

The senior astronomer nodded his head reluctantly. His wisps of hair moved as though alive in the air currents. "We could, of course. However, the technique is not terribly useful. For one thing, with only a single instrument, we have no ability to triangulate observations. What good is it for me to watch your ship cross my field of view if I have no third dimension with which to pinpoint your location? Do you think the guard has enough ships to search every kilometer along a constantly changing position vector some ten thousand light years long?"

"We are less concerned with the tactical utility of this observatory than its strategic implications in the long term. Up until now, we have taken great care to mask the movement of our fleets in order to preserve the element of surprise. After the battle is joined, we will no longer have that luxury. Our ships must to return to their bases periodically for refit and resupply. Given time and sufficient observations, the guard will be able to pinpoint the location of our bases. We can't risk that."

The worlds of the Hegemony were well known to the Galactic Guard, and nearly defenseless against a determined space attack. Likewise, the worlds that circled the central suns of human space were known to the Hegemonic Navy. What kept everyone safe was the ancient principle of "balance of terror." So long as the rebels maintained a credible striking force able to revenge gigi terror raids, then Tessa Hallowell's family on Askar would remain relatively safe.

For twenty years, the Hegemonic Navy had secretly built bases on unexplored worlds circling out-of-the-way suns. A base whose location is unknown cannot be attacked, which left the rebel fleet free to devote its full efforts to defeating the guard intheir home systems. All that would change, of course, if the Extragalactic Tachyon Observatory were able to track the Hegemony's ships. Even with deceptive maneuvering, there would be no hiding the number of ships that stopped in supposedly uninhabited star systems. Once those systems were identified, the Galactic Guard would concentrate overwhelming force there to quickly end the rebellion.

After long seconds, Vannick cleared his throat and asked, "If you were truly interested in the long term strategic outlook, you would call off your attack."

"Why is that?"

There was a brief struggle on his face as a variety of emotions raged within him. Finally, he said, "Never mind. I suppose that you want us to track the guard's ships for you rather than vice versa."

Tessa Hallowell shook her head. "No, my orders are to evacuate your people and then deny the use of this observatory to the enemy."

"Deny how?"

"I am to vaporize this habitat and destroy as much as possible of the sensor array before returning to the galaxy."

For an instant, she worried that he would have a heart attack. The already pale face turned ashen and his whole body shuddered as though stricken. When finally he regained the use of his voice, the elderly astronomer croaked, "You can't!"

"I can, sir, and I will. I have my orders."

"What if I give you my solemn word as to our neutrality in the coming war?"

"Not good enough."

"We'll give guarantees. You can rig a bomb to blow us all up at the first hint we've betrayed you."

"The first hint will come when the Galactic Guard slags down fleet headquarters. No, Professor, I am sorry. This observatory will be destroyed."

Vannick hesitated for long seconds, and then sighed heavily. When he spoke, it was with the air of a man who has struggled with his conscience and come to a difficult decision. "Before you destroy the observatory, Captain, there is something you must see. I think you will agree that it places all of this in a different light.

"A very different light, indeed!"

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Without waiting for her answer, Vannick slipped his restraint and clambered across the desktop like a monkey at feeding time. She considered having the Cochrane halt him, but decided that the quicker whatever game he was playing was over, the quicker they could begin the evacuation. Instead of ordering Vannick stopped, Tessa ordered the sergeant major and his guards to follow them. The small party swarmed along the circumferential corridor, then turned upward into a radial corridor that led to the interior of the habitat.

Within a few dozen meters, she found herself floating in a large spherical space. A platform with several workstations hovered at the sphere's center, held there by some invisible means. Vannick immediately kicked off and floated the ten meters to the platform. Tessa ordered the guards to station themselves at the entrance hatch and followed him. She anchored herself beside the astronomer, who was powering up various controls.

"What now?"

"Watch," he said, cryptically.

A moment later, she was no longer inside the featureless gray sphere. Instead, she hovered in deep space with the galaxy spread out below her and the infinite universe above. The view was the same as she had had from her gig, except the stars were a bright kaleidoscope of colors that bore little resemblance to the pale radiance they exhibited outside. Overhead and behind them were dim patches of colored light that represented the far galaxies.

"A holographic display from the tachyon array," the astronomer explained. "You are seeing the galaxy not in visible light, but rather, by the superlight particles that stream out of the interiors of stars."

"Why the false colors?"

"They denote particle energy. Red is for the slowest tachyons, blue for the fastest."

"I thought tachyon velocity was infinite."

"Close enough to it that it doesn't matter for most purposes," Vannick agreed. "Even the slowest can cross the known universe in less than an hour. However, if they were infinitely fast, there would be no way to detect them. They would appear to be everywhere at once, with no means of telling their direction. As it is, we require more computer power than most planets to interpret the readings we receive from the array."

"Surely this isn't what you brought me here to see?"

"Right. Let's take a little journey." He passed his open palm over one of the controls as he spoke a series of coordinates. Suddenly the sky changed around them.

"The galaxy is only one of billions, you know. Galaxies are arranged in gravitationally bound groups called clusters, and clusters of galaxies are themselves arranged in superclusters, and so on virtually *ad infinitum*."

"I excelled in astronomy at school, Professor," she said acidly, not knowing where he was going with all of this. She watched while the universe rotated and the galaxy, which had below them, began to shrink precipitously. In less than a second, the Milky Way was just another hazy patch of light on the ebon vault of the viewdome. Other patches streamed past her until one particular patch began to grow. As it grew, the smudge of light split and became numerous tiny smudges, which in turn grew until each developed a tiny shape of its own. When the expansion halted, it was as though some careless giant had sown the sky with hundreds of tiny spirals, each oriented at random.

"This is the Virgo cluster of galaxies, which is the gravitational center of our own local supercluster. It is about 70 million light years from here. It contains some 250 large galaxies and about 1000 smaller ones."

Tessa felt a momentary pang as her mind struggled with the scale of the universe, something for which the human brain is singularly unsuited. After seven centuries of star travel, humanity had visited less than 0.1 percent of the suns in the home galaxy. As for the Andromeda Galaxy, humanity's closest neighbor, it remained unattainably distant. On the viewdome stretched hundreds of galaxies, many far larger than the Milky Way, all crammed into a portion of the sky that could be covered by a thumbnail held at arm's length.

Nor was this particular galactic cluster unique. There were galactic clusters everywhere one looked in the sky, so many that the astronomers barely paid attention to anything as small as a mere galaxy. The entire fifteen billion light year diameter of the universe was so filled with galaxies that on a large enough scale they had the appearance of being the foam flung skyward by some overpowering violent surf. There were more galaxies in the sky than grains of sand on a beach. It was enough to give even a starship captain a feeling of inferiority.

The Virgo cluster was so large, the number of galaxies within it so numerous, that it took a dozen seconds for her to notice the small violet sphere in the crosshairs of the viewdome's coordinate display.

"What is that?" she asked, wondering if it were part of the display.

"That, Captain Hallowell," the astronomer said heavily, "is the reason why the Hegemony must not secede from the Communion of Humanity. More importantly, it is the reason why you must not destroy this observatory!"

"What is it?"

"We call it The Void. It is absolutely pure vacuum as far as our instruments can determine. No stars, no planets, not even cosmic gas or dust."

"How come we can see it then?"

"For reasons that I will explain, the void possesses an event horizon. Any normal matter that crosses that event horizon is converted into pure tachyon energy."

"Event horizon? Like a black hole?"

"The analogy is close, but The Void is not caused by gravitational curvature like a black hole. In fact, we do not know what causes it. All we do know is that it appears to be a sinkhole into the tachyon universe."

"I'm afraid I didn't get that far in astronomy class, Professor. What, exactly, is a 'tachyon universe?"

"The theory is a very old one. It was first postulated more than a thousand years ago and has been generally accepted since the invention of FTL travel. It was back in the twentieth century that people first realized the true nature of the universe, namely that it began in a titanic explosion. Our ancestors somewhat whimsically dubbed this colossal event 'The Big Bang."

"I'm familiar with the concept."

Vannick ignored the sarcasm. "The important point is that the Big Bang did not create one universe, but three. Those three are the universe we see, the antimatter universe, and the tachyon universe."

"I beg your pardon."

"Believe me, Captain, there are strong scientific reasons for believing that these universes exist. Your ship is one. Without The Trinity, as the three universes are collectively known, there could be noftl ships."

"Right. What do these other universes do?"

"The antimatter universe, as the name suggests, is composed almost solely of antimatter, just as ours contains mostly normal matter. Time flows backwards there."

"Time flows backwards?"

Vannick shrugged. "Why not? There is nothing inherent in the nature of time that causes it to have a preferred direction. In fact, antimatter is nothing more than normal matter for which time is reversed. The tachyon universe is the one that contains all of the superlight particles created in the first moments of the Big Bang. Nothing in the tachyon universe can travel slower than light, just as nothing in our own universe can travel faster than light, save inside anfil drive field.

"You called The Void a 'sinkhole."

Vannick nodded. "We think our universe has somehow managed to collapse into the tachyon universe, taking a great deal of normal matter with it."

"And matter that falls into the sinkhole are transformed into tachyons?" Tessa asked, interested in spite of

herself.

"Correct. Normal matter cannot exist there."

"Interesting," she said, "but I fail to see what this has to do with my mission, Professor."

"Two years ago, Captain, The Void was but a bright, dimensionless point of faster-than-light energy. It is now four million light years in diameter and has just consumed its second galaxy. If it continues to grow as it has, within 75 years, *it will consume our galaxy!*"

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For a moment, the viewing compartment became indistinct as Tessa labored to catch her breath. The sensation was remarkably like being punched in the stomach. When finally she could speak again, she asked, "Is this some sort of a joke?"

"If it is, it isn't a very funny one," he replied puckishly.

"Why haven't the other astronomers reported this?"

"The other astronomers work with electromagnetic radiation, which is limited to light speed. The Void's rate of expansion is trans-Einsteinian. Normal light astronomers will see nothing awry even should they happen to be staring directly into The Void as it washes over them. The wave front is advancing at a million times light speed."

"So you alone have discovered this menace?" she asked caustically.

He nodded. "My people and I. We have the only instrument in existence with the capability of mapping tachyon emissions at such long range. We have been studying this for two years. Our data, which we have forwarded to all of the major astronomical facilities within the Communion, has been classified Most Secret. It was the government's hope to avoid mass panic. Perhaps it would have been better to release the news. Panic just now would be vastly preferable to rebellion."

"How do I know that thing out there is real? You could easily have programmed your computer to display this ... this ... hallucination!"

Vannick moved his hand across a new set of controls and suddenly The Void expanded until it was more than two meters across. At this level of magnification, it was fuzzy, with the barest hint of a mottled surface.

"Does that look like a spur of the moment programming job? We have thousands of hours of observations on file. Do you think we could have produced those in the few seconds between the time your people blasted their way in here and when we were captured?"

Tessa hesitated. She had to agree that they had not had any time to react to the invasion, unless they had spotted *Warwind* during the long approach. Except, if *Warwind* had been seen, New Rome would now be on full alert.

"Show me your files," she commanded gruffly. She was beginning to understand the implications of this new discovery. Suddenly the universe did not seem so large and impersonal. In fact, it had just become *very personal!* 

Vannick complied with the order. He showed her records of The Void when it had been a dimensionless source of tachyon emissions, as it had looked when it first developed a disk, and again, when it

consumed the galaxy in which it had formed. The review took more than an hour, but in the end, Tessa Hallowell found herself convinced of the truth of the astronomer's claims. Convinced and very confused.

She spoke not a word when the last fuzzy starfield faded and the lights came up in the observation globe. She considered for a moment, and then asked, "What is New Rome planning to do?"

"What can we do for the moment except observe the beast?"

"Can it be stopped?"

The astronomer laughed. There was very little merriment in the sound. "Our ancestors used to think hurricanes were awesome. Compared to The Void, a hurricane isn't even Brownian motion!"

"You're saying that we're helpless."

"Not helpless, Captain. We can learn everything possible about the phenomenon and then figure out how to keep out of its way. That is why you must not destroy this observatory. We need every minute remaining to learn all we can."

"Keep out of its way how?"

"How fast is your ship?"

"That is classified information."

"Let me guess. Your top speed is about fifteen thousand lights, correct?"

"Something like that," she allowed.

"Well, if we're going to outrun The Void, we need ships with top speeds on the order of 2 million lights. Even if it gobbles up the entire universe, it will take 1500 years to do so. We can learn a lot in fifteen hundred years. Perhaps we will learn how to survive whatever comes after. Then there is the possibility of escaping back into time. Remember, time runs backwards in the antimatter universe. Why not here, too?"

"If we had escaped back into time, wouldn't there be a record of it?" Tessa asked.

"Not if the refugees from the future colonized worlds far distant from those we now inhabit. The universe is a large place, Captain Hallowell. There is nearly an infinity of worlds we could use. I have had two years to think about this, and believe me, the possibilities are endless. However, we must concentrate the energies of every single human being on the problem. This is no time to divide the race with a war, Captain."

"I don't make policy, Professor."

"You can influence policy!"

"How?"

"By reporting what you know. If you were to tell your high command about The Void, then they will call off this insane attack. I know they will."

Tessa shook her head. "Too many ships are in motion. Things have gone too far to call them back now."

"Have they?" he demanded shrilly. "Have they really? There is no power in the universe that can recall those ships?"

In reality, she knew, there was. Every ship captain had been supplied with a code sequence to abort the attack if they came across evidence that the Galactic Guard had been forewarned. A captain who used the sequence for any other purpose would likely be shot.

"I'm sorry. I have my orders and I must carry them out. The universe will have to look out for itself until we win our freedom from New Rome."

"Think, woman! We are talking about the end of everything we know in less than 75 years! That isn't even one lifetime. If we start building now, we may be able to save much of our population when the time comes, but not if you people and the Galactic Guard slug it out across the star lanes for the next twenty or thirty years."

"We project a war of less than two years," she answered, no longer as sure of herself as when she had boarded her gig this morning. In truth, history was rife with such rosy predictions. They seldom came true. "There will be plenty of time afterwards to study this void of yours."

Vannick gazed at her as one does a student who is slow to understand the lesson being taught. When he spoke again, there was soft pity in his voice. "The Void may not be our only problem."

"What do you mean?" she asked, suddenly suspicious.

He dimmed the lights and brought the display back up on the screen. He passed his hands quickly over the controls. The violet void dimmed until it became a phantom object framed against the obsidian blackness of space. Somehow, it had also grown larger and fuzzier, as though it had developed a halo. The halo was not violet like the sphere. It was pale yellow and indistinct, so much so that it was nearly invisible.

"What did you do?"

"I've filtered out the highest energy tachyons. What you are seeing now are low energy particles that tend to be washed out when we look at The Void."

"Low energy tachyons? What is the source?""

"Starships."

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Tessa Hallowell barely reacted to the news. There had been too many shocks this past hour. She was put in mind of an old expression: "You can't wet a river." That was the way she felt.

"Whose starships?" she asked in a voice made toneless by too much emotion.

"The races of the Virgo Cluster, of course. You didn't think that we were the only starfaring race in the universe, did you? God wouldn't be so wasteful."

"But it has only been two years since the appearance of The Void. How did they arrange an evacuation so quickly?"

"A good question," the astronomer agreed. "In some cases, they must have only had a few months warning, possibly less. Even on such short notice, they managed to send billions of starships in this

direction at velocities substantially in excess of a million lights. We are going to have to deal with those people long before The Void's event horizon passes this way. Do we want to be engaged in war when those ships arrive in this vicinity? Moreover, what about all of the other races from all the thousands of galaxies that will soon be taking flight? Just how crowded do you think it will be on whatever distant planets we finally choose for refuge?"

It is often said that one's life passes before one's eyes at the moment of death. Tessa experienced a similar sensation. She suddenly found herself floating above her father as he blasphemed New Rome. Her detached consciousness seemed to hover in a classroom at home on Askar as her teachers and fellow students plotted rebellion in hushed tones. She watched as though detached from her body as she once again slaved through the 27-hour days to gain admittance to the Hegemonic Space Academy, and she relived the overwhelming surge of pride that she'd felt when she had been given *Warwind* to command.

It was as though all of her emotions had been burned out through overwork. Try as she might, she could not recapture the patriotic fervor she had once felt at the thought of throwing off the Communion's yoke. Indeed, as she watched the tracks of starships fleeing The Void, it was difficult to recall the Hegemony's reasons for wanting to separate from the Communion of Man. Suddenly the coming fight with the *gigi* 's seemed akin to two ant colonies fighting over the same crust of bread.

The attack of ambivalence lasted an eternity that measured a dozen seconds by chronometer. When it passed, it left behind a Tessa Hallowell who was not the same woman who had set out from her ship a conquering hero. This new Tessa Hallowell was much older and wiser than that adolescent of a few hours previous. She turned to Vannick and with deceptive calm said, "I want recordings of all your observations, along with all communications relating to The Void."

"You'll get them, Captain."

"Good. I will broadcast them to my headquarters as soon as my ship breaks orbit. I suggest that you send a warning to New Rome about what you have learned today, as well."

"Does that mean that you aren't going to destroy the observatory?"

"It means that I will probably be shot for not doing so, Professor Vannick. I hope it is worth it."

"It is," the relieved astronomer said. "And, Captain, ... thank you."

Tessa barely heard him. She keyed her personal communicator. "Sergeant Major Cochrane."

"Yes, captain?"

"Prepare to disembark the observatory. We're going home."

There was a heartbeat's hesitation before the customary response. "Yes, ma'am!"

"Patch me through to the ship."

The next voice she heard was that of Warwind's communications officer.

"Pasqual, send 'Vertigo Veritatus Velocipede' to headquarters. Do you have that?"

"'Vertigo, Veritatus, Velocipede. Aye aye, Captain?"

Tessa listened to the words that would cause a mighty armada to halt in its tracks, turn around, and then

return to base without a shot fired. She hoped she was in time. She waited tensely for the automatic acknowledgment from Hegemonic headquarters, knowing that it would take a few minutes before the angry questions began to fly starward. She ordered communications to shut down, anxious that her own arrest order not arrive before she'd had time to explain her actions to her crew and superiors back home.

She turned to Vannick and said; "We'll have to draw from your stores in order to get home, Professor."

"You are welcome to everything we have in surplus above our barest necessities, Captain."

A very chastened Tessa Hallowell climbed aboard her gig half an hour later with several record cubes tucked into her pockets. She gazed neither at the Milky Way, nor at the tiny patches of other galaxies. She no longer felt any desire for stargazing. The universe no longer seemed the overwhelming giant that it once had. In fact, despite being fifteen billion light years in diameter, it seemed almost claustrophobic.