

NAMES¹
 Marc Miller
 About 10,000 words
 Annotated^{2 3}
 And Illustrated⁴

After the battle, we carved the names of our dead, in letters two man-heights high, on those white granite cliffs overlooking the newly-named Sea of Heroes. My name appears in that list thirty-two times.

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1072 to 1094⁵
 Spin 1910 Regina A788899-C Ri Pa Ph An Sa Cp⁶

I sent my childhood⁷ in a crèche,⁸ a substitute for parents who travelled in pursuit of goals more important than me. They paid the appropriate fees and I received a generally good education.

I grew up alone, escaping into books and solitary games. Others excelled in speaking, or sport, or studies; I was neither motivated enough nor talented enough to strive for anything.

In my twelfth year,⁹ however, I formed some glimmer of ambition and decided that I would be athletic. Anyone can run. I could run. I would be a runner. I made a point of running every morning. I read what I could find; watched videos, tried various activities and exercises. My progress was slow, and I was impatient. I made for myself a plan.

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² Footnotes allow me to insert details, background, and commentary about the Traveller universe. Footnoting is certainly not a conventional approach to fiction, but I hope it enhances the experience.

³ This story takes place in the Traveller universe. A previous story: The Red Ship (available free at Baen Books: <https://www.baen.com/free-stories-2020.html>) addresses this same situation some 400 years previous.

⁴ Images help as well.

⁵ Year dates are counted from the founding of the Imperium.

⁶ A standard astrographic convention identifying a world and its characteristics.

⁷ Our unnamed first person protagonist was born in the year 1072. The length of a year for a planet of average size orbiting in the Habitable Zone of a star in the spectral G range is strangely consistent: Vland, Capital, and Terra all have a year of about 365 standard 24-hour days.

⁸ A nursery. In this case, a boarding school.

⁹ The year 1084.

I approached the school's facilitator and asked that my discretionary account fund a wafer jack. I made the best case I could: it would improve my academic performance; it would facilitate studying; it would widen my horizons; it would help narrow my focus.

I avoided stating my real purpose: I would find a running star's skill set and make it my own. I think now that my facilitator understood my plan and approved of my ambition, or perhaps simply didn't care.

The jack was implanted, and after a diagnostic scan, the installer told me it was fully functional. I had planned for this day for months, and I could hardly contain myself.

"This will take several days to heal." The tech was dismissive and had said very little through the whole procedure. Now he rotely repeated sentences from a screen and touched tabs to confirm that he had spoken the words and that I had heard them.

"Don't use a wafer for more than a day. Don't sleep with a wafer inserted. Make sure it's clean.

"Use only approved wafers. Make sure it has the SDEIES codes; other sequences won't work.

"Go slow. The wafers may work, but your brain hasn't yet adjusted."

Finally, "Here's the introductory pack. And a promotional storychip¹⁰ from Naasirka."

I didn't care about fiction. I had a single question, "When can I try it out?"

He said, "It works now, but you should give it at least a day."

I went directly to the track. I had prepared myself in anticipation. I stripped off my overpants and jacket; underneath I already wore running shorts and an appropriate shirt. I ignored that sheaf of orientation, sampler, and introductory wafers. I had already found and bought an official "Champion Inith Vagner" wafer¹¹ for track and field. It promised to provide me with the skills and experience of a champion runner, and probably jumper, and javelin thrower. I held the wafer to the nape of my neck and felt the magnets pull.

Nothing. There was no difference. I felt the same. I was supposed to be a champion runner. I started my jog around the track and instinctively touched my monitor without looking. Except, that wasn't my instinct. I had always struggled with the right settings and activations on my monitor, and I had just activated it without looking. I became two persons: me self-observing a distinct other me running, and in the process noticing differences. I sensed my ankle turning slightly and corrected it. Made a point of exhaling on the exertion. Noticed I was now making a bit more effort on the leg extension. At the end of the track my finger went unbidden to the monitor. I counted exactly 40 steps of cool down, and only then looked at the readout. I had bettered my best time by 3 seconds.

I was going to be a champion.

¹⁰ One of the most common reasons for ordinary people to get a wafer jack: in depth participatory stories.

¹¹ I can imagine a market in recreational skill wafers for a variety of avocations. A Bob Ross painting wafer; a similar skill for woodworking, or knitting, or swimming.

Except, I wasn't. Skill and talent are distinct. I could run faster than anyone with my level of talent, but our team, and the teams of our rival schools, were populated with better talent. My legs weren't long enough; my muscles did not process lactic acid efficiently enough. My lungs had insufficient capacity. Worse, with my wafer in, I knew it, and I knew why. I knew that nothing would ever remedy my native insufficiency.

On the other hand, I also saw the flaws in my fellow team members, and in their rivals. I also seemed to have a native ability to relay what I saw without alienating them. After several weeks, Coach made me the student facilitator. I maintained schedules, ensured that the team transport had the proper load of absorbent towels, sanitizer, equipment, and monitoring devices, and generally facilitated the efforts of the team. It was that, or not belong.

I also found that in my ambition, I had miscalculated. I focused on the benefits of a wafer jack. I was already a loner, and I had missed the social cues around me. Gentlemen and leaders were not wafer users; wafers were for servants and clerks.¹² My classmates, with whom I already had only casual social interaction, reduced their estimation of me.

Being student facilitator theoretically entitled me to the same recognitions as the competitors: a jacket embroidered with the sigil of our school, early dismissal from classes so I could attend practice, attendance at the recognition banquets, even lowered expectations from my academic instructors. I walked with the athletes and even fancied that I was one of them. But I was fooling myself.

I always took my wafer out after track practice. Well, almost always; sometimes when I was distracted or hurried, I left it in until evening. That time was one of those evenings.

It had been a brutal workout day; I had naturally (?)¹³ evolved my schedule into long-distance running, alternating with strength training days. I worked out alone. I started toward my room alone. Ahead was a knot of athletes in their bicolor jackets and school insignia. My particular team accepted me; I was their facilitator. This was a different team that saw me only from afar. One, the leader, blocked my way. I tried to be submissive, inconspicuous. That didn't work. I stopped and he attacked with words like *waferhead* and *plastic*. I took it; I had no choice. It would pass.

As I stood with my head down, he pushed me backwards in a typical bullying move. It caught me off balance, and I staggered back, then regained my balance. He took another step toward me, readying another taunt.

My arm extended in a reflex. My palm to his nose. Flattened it. Broke it. Blood gushed. I took a step forward even as he staggered back surprised. I wiped my palm on his jacket, pushed. I stepped past as he tripped backward and fell. I walked on.

¹² Wafer use is generally understood to be a lower class pursuit.

¹³ Is the resulting workout schedule the result of personal decisions, or is it driven by the wafer?

My pace quickened, as did my heart rate. What had just happened? Now a flood of facts rushed me: Flat palm, not fist. Broken noses heal; gouged eyes are permanent. Once you attack, don't stop. Keep him off balance. Protect yourself. Leave.

There were, of course, consequences. Our school had a strict both-fault bullying policy. They cared not who started it: it takes two to fight, and two should be punished. It's intended as a deterrent warning to everyone. Because we had actually shed blood, we should have been suspended, but my bully was a star on his team and vital to an upcoming competition. We were forced to mutually apologize, which was easier for me than for him, and our encounter was considered resolved.

I rose slightly in my own team's estimation. Our team co-leaders talked to their co-leaders, and I was thereafter immune from taunts, and I would detour, if necessary, to avoid encounters.

I also grew my hair slightly longer to cover my wafer jack.

The end of my crèche residence marked the end of my athletic ambitions. Sport after adolescence is competitive and all-consuming, and I was not good enough, nor even interested enough, to pursue sports management. I selected a reasonable, reputable university that my discretionary fund could afford and pursued some sort of education. I didn't know what I wanted. I marveled at those who could dedicate their attentions to engineering, or medicine, or advocacy. How could they know as adolescents what they wanted so clearly?

I dabbled: in art, and language, and philosophy, and history. I depended on my wafer. I discovered its limitations and adjusted to them.

The prototypical wafer use is emergency skill availability. Somewhere a parsec¹⁴ from any available support, a ship's drive breaks. Petabytes of manuals and documents are available, but a certain skill is required even to know what search terms to use. Imagine trying to teach oneself detailed drive repair from a display screen, under time pressure, with your life depending on it. Computer diagnostics may focus attention on some specific action, but nothing can substitute for basic skill and experience. Except a wafer. The drive engineer can retrieve the appropriate emergency wafer and instantly know how this particular part can be removed, heat-treated, cold-treated, fault-checked, replaced, and depended upon to allow this inoperative drive to become an operative drive for at least long enough to bring the ship to port. When the engineer removes that wafer, all of that knowledge just vanishes.

I encountered the same with an art wafer, or a history wafer. I discovered that I could write an insightful paper on the Solomani Rim War¹⁵ filled with supporting facts,

¹⁴ For clarity, a parsec is 3.26 light-years. The parsec is the standard interstellar mapping distance.

¹⁵ A conflict far too complex to fully describe here. Essentially the Imperium fought (and defeated) a rebellious Terra about a century previous.

interesting details, and even obscure anecdotes. When I removed the wafer, the knowledge vanished, but I still had a document that my professor liked, and that I could read, reread, study, and learn from.

I enjoyed my college career, aimless as it was.

In my final year, I met a girl. Silk. She was cute. Beautiful. Smart. She liked me. We enjoyed many of the same activities. After a few weeks, we spent literally all of our free time together, and when we were apart, she was all I could think of. My aimless academics found focus and direction. I could see a life with this woman. Children. A career in teaching. A house in the suburbs.

I had, however, made a mistake; I had not mentioned my wafer. It's not something one discusses in a new relationship. Then, we had progressed to something more. There was never a convenient time. I told myself it didn't matter. Wouldn't matter. Until it did.

I remember that day clearly. We were sitting on a bench, close, touching. I remember her stylish shimmering green blouse. "What's this?" she asked as her fingers brushed my hair.

I stumbled for words. "What? Nothing." Wrong answer, I thought; try again. "It's a wafer jack."

She tensed, turned to face me, "You never told me you had a jack."

"It never came up. It's just there."

"I would think you would mention something like that. Do you have a wafer in now?"

"No. No, I got it for athletics." I was stuttering for words, most likely because I could tell this was unexpected, and unwelcome. She became angry that I had not told her sooner; said that I didn't trust her. She accused me of using wafers to gain some advantage, in school, or with her, or just in general. She said they made her question everything about me. I used my words poorly, alternately pleading, and justifying, and dismissing concerns, and nothing seemed to work. I wondered if there was a persuasion wafer I could use. After some minutes of uncomfortable discussion, she gathered her things and left.

I messaged and called several times, but she did not respond for a full day, and then it was "I need some time." It was literally the longest we had been apart in months. After another day, her message was "We need to talk," followed by a time and a place.

She apologized. I said there was no need. We reconciled, and agreed that my wafer was just an appliance that made no difference. We went back to the way things were, spending time together, watching entertainments, discussing history, or management styles, or instructors. It was the same, and yet it wasn't.

A week later, she told me that she had accepted a management post on Rhylanor¹⁶ after graduation. It was an important job with an important company and she could not pass it up. Things were not going to work out with us. She left, and I never saw her again.

Graduation¹⁷ was a formality that I forwent. It was optional. My degree would be recorded in the databases. I didn't care about celebrations. I didn't care about anything.

¹⁶ An important world some ten parsecs (about a month in travel time) distant. Barring some intervening event, they would probably never see each other again.

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339-1094¹⁸

Spin 1910 Regina A788899-C Ri Pa Ph An Sa Cp

I found myself at the merchant annex of the starport outside the city. Tall transpex panels overlooked dozens of ships, loading and unloading, moving and stopping, flying and landing. Somehow, I found the constant stream of ships soothing, or distracting. Over to one side, I saw a panel in several languages: in Anglic it proclaimed Hiring Hall. I finished my drink and made my way there. Without thinking, I touched tabs on panels: name, identifiers. It found database entries, and I confirmed that they referred to me.

The screen directed me to a specific numbered landing pad and the console ejected a plastic card with instructions. Slideways and walking took me to a red and white ship streaked with re-entry char, and a distracted woman who asked a few questions with easy answers. Her final question was, “Do you need to gather anything before we leave?” I realized that I really didn’t, and so told her no.



Far Trader¹⁹ *Lady O*²⁰ lifted an hour later with me as her newest crewperson.

¹⁷ Graduation was in year 1094.

¹⁸ Standard dates within the Imperium use the format ddd-yyyy, where ddd is a consecutively numbered day (1 to 365) followed by the four digit year.

¹⁹ By convention in the merchant community, a Trader is an itinerant merchant ship carrying speculative cargo between (usually backwater) worlds. The modifier usually begins with the letter F. Far indicates a greater than usual jump capability. Other possible modifiers include Fat, Flat, Free, Fast, and more.

There were reasons the *Lady O* hired me so easily. It showed a lack of maintenance, dirty floors (I soon learned they were called *decks*), and spots of corrosion. There were apparent cash flow issues. I was supposedly a temp, not even a spacehand. Theoretically, I would learn on the job: load cartons in the hold, meal prep for the passengers, unload cartons from the hold. In between, I would clean. Someone was supposed to teach me the basics: vacc safety, emergency procedures, console access. They didn't; I taught myself.

The real reason, I soon discovered, was that I had a wafer jack. Engineer had quit after some dispute about an unpaid bonus. First Officer (the woman who had hired me) had responsibility for astrogation, not engineering. She could handle routine tasks at Engineer's console with basic drive settings and adjustments, but I was expected to insert a wafer and fix the occasional broken translimiter or faulty feed valve. My life was filled with challenging work that occupied me fully. In a few spare moments, I could see myself advancing up the ship crew career ladder.

Our ship was a strange hybrid, capable of travelling three parsecs in a week,²¹ but also enhanced with auxiliary fuel tanks that allowed us to take cheap shortcuts at a small time penalty. The arrangement allowed Captain to wander the Wilds²² beyond the Imperial border in search of cargos that could turn a good profit; sometimes they did, but often they didn't, and so we left more than one system certain we would be unwelcome if we returned.

Our core business model was buying goods cheap on one world and selling them dear on the next. After we unloaded and sold our current cargo, First²³ presented a range of potential destinations along with profit forecasts and Captain picked one. They then slept on it, occasionally having second thoughts, but usually not. In the morning, they announced our next port of call to the assembled crew, and we all set about final preparations.

The best-laid plans often go astray, and I can't say that our plans fell into that "best" category. In my observation, First often bought goods based on the lowest price rather than best suitability for the next market. There came a time when everything seemed to go wrong. We arrived at Dzukoun²⁴ two days after another ship with an identical cargo.

²⁰ Historically, *Lady O* was a lady-in-waiting (and bodyguard) to the Empress Arbellatra.

²¹ This capability is called Jump-3.

²² A general term for territories lacking substantial, or effective, interstellar government. Specifically here, the Vargr-dominated territories immediately coreward of the Imperium.

²³ The spectrum of ranks on a Trader is Captain, First, Second, Third, and Fourth. Each has a responsibility: Pilot, Astrogator, Medic, Engineer, and Steward. There are other responsibilities including Freightmaster and Gunner.

²⁴ Dzukoun. Gvurrdon 0703. B788899-7. A pleasant world some forty parsecs from the Imperial border.

The people at Thaerarrg²⁵ desperately needed our cargo of carbohydrates and supplements, but literally had no money to pay for them; I think we still have a credit in our account there. The broker at Asal²⁶ miscalculated and sold our cargo at a loss, and still insisted he was owed a commission.

I used a wafer and proposed some deals, but they were only marginally profitable. The wafer I had assumed Human markets; Vargr markets are different. I learned details of cargo marketing outside of wafer skill sets, but we still struggled.

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154-1097

Knoe 0737 Zueuer B76A76B-9 Ri Wa O:Knoe-0937

I was counting inventory in the hold; scanning stacks of cartons with my comm and comparing numbers against the master list. The count was off by one somewhere and I was determined to find it.

I was startled when First spoke my name. After I recovered, I started to explain what I was doing, but First waved that aside.

“This is our new gunner.²⁷ I want you to get her set up.” Then she turned and left.

I was not consulted on new hires, and we gained, and lost, various crew positions on a regular basis. The new gunner and I walked the length of the ship to the stern bunks, and I made small talk along the way: names, homeworlds, previous experience. Her name was Beecie.

Then, I started to talk out our current situation. “Out here in dogspace...”²⁸

She interrupted. “Wait a minute. They call us Humans,²⁹ not apes. We owe them the same respect. Vargr, not dogs.”

Who was she, the new hire to tell me how to talk? We all called them dogs. Sometimes they called themselves dogs. And they certainly called us apes. Or, some equivalent word in their growling language.

But I didn’t say that. I sort of grunted an acknowledgement, “I understand,” and continued our conversation. I would bide my time. I could just hear her criticizing Captain to his face.

²⁵ Thaerarrg. Knoellighz 0639 C6A0331-6. A desert world with a strange atmosphere replete with compelling smells.

²⁶ Asal. Knoellighz 0637 B5A0500-D. A desert world curiously similar to Thaerarrg.

²⁷ What circumstances underlay the availability and hiring of a Human female gunner deep in non-Human territory some 50 parsecs beyond the Imperial border?

²⁸ Dogspace. A pejorative term for regions dominated by the Vargr. Some Vargr probably refer to the Imperial territories as apespace.

²⁹ The stylistic convention is the capitalize sophont species, primarily to avoid confusion between Human the species and human the trait. On the other hand, the convention is to not capitalize pejoratives: dog, ape, stilt, joe.

It happened two days later. We ate our end-of-day communal meal in the commons. We were talking shop and Beecie listened for a while. Captain was lamenting how the dogs conspired to underpay for trade goods and overcharge for starport services.

“Dogs is inappropriate. They are Vargr.” Captain certainly registered surprise.

Beecie continued, “These people are our customers, our clients, our suppliers. We get money from them for the goods we sell. We pay them to refuel us and service our ship. We expect them to do it right. Our lives are in their hands, in more ways than one.

“They must be hearing you calling them dogs. You are ignoring their own cultural value for small group hierarchies. They deserve your respect until they prove unworthy. Our ship’s Imperial registry commands some deference, but when you talk like that it triggers micro-aggressions. They aren’t conspiring across parsecs to defraud you. They just don’t like you. If you ever come back to the same port, they will remember.”³⁰

No one ever talked like that to Captain. We awaited his outburst response. Except First interceded. “Beecie is right.”

I would like to say that our fortunes changed that night, but they didn’t. We adjusted our speech, although some were better at it than others. Some grumbled for a while. The drive room instituted a dogbox,³¹ requiring a coin every time a tongue slipped. Over the next several months, our financial decline was slowed, but did not stop.

On the other hand, my perception changed. If I refocused my eyes, I saw the Vargr as people. Granted, they had long snouts, fangs, wet (or dry) noses, but inside they were people just like us. A typical starport layover was about a week. In the first days, and in the last days, we were busy with responsibilities, but in the middle I could take the day off to visit points of interest: the local archive, the market, museums, parks. With the proper wafer in place, I could understand and converse in their language.

My interest was history. Each world had its own course of defining events, which I found fascinating. On some worlds, their history paralleled similar Human histories, and on others they branched into strange alternatives. There were thriving communal societies, military governments, and cults of the personality. Where the brisk interstellar trade routes made the technology of devices more-or-less uniform, I found Vargr worlds that preferred alternative systems: that were founded on magnetics, or fluidics, or biologics, rather than standard electronics.

I also encountered another limitation of wafers: they cannot multi-task. I could read a text in the native Gvaeg, understanding each word and phrase, and it still made little sense to me. Our translation processes were less than perfect and the results were often

³⁰ I had an exchange similar to this one myself. I sold for a mutual (owned by the policy holders) insurance company, and a fellow agent spoke deprecatingly of Asians. I spoke up, and the speaker apologized. I found it notable that our manager, who was present, did not speak up, and did not join in with support. I never heard such comments again, but that doesn’t mean they weren’t made.

³¹ I sense a certain irony here, that the penalty jar is named with a pejorative.

confusing. A technology wafer might have helped, but only if I already knew the language. Over the course of months, I taught myself Gvaeg—the dominant language of the region—as well as Aekhu. Beecie helped; she knew both.

I collected histories. Indeed, I made a point of finding and acquiring two or three local histories for each world we visited. My tablet became a reference library. I found I looked forward to each new world and the chance to increase my collection.

043-1098

Knoe 2829 Ruegno E654544-6 Ag Ni

Finally, on some obscure world, First had to decide between food and fuel, opting for quality fuel and lesser quality food. We had never faced that challenge before.

Once we were in jump, Captain called a crew meeting. We expected bad news and were surprised.

“We have been chartered. A half-year at triple rates, plus hazard pay. We are to carry supplies in support of a military campaign.”

Engineer gave his opinion. “Are we fighting? I didn’t sign on for fighting.”

Captain quieted Engineer’s worries with a gesture. “Calm. Calm. We are non-combatants. We ferry vital supplies to the combat zone, but we don’t fight. In any case, they are paying hazard pay, not combat pay. We’ll stay well away from any shooting.”

Our prospects were improved, but on that first jump of our new mission, our food was still substandard, and there were complaints. I complained.

Beecie said, “Oh, you just don’t know how to prepare it,” and set about gathering items from cabinets and preservers. She made me engage as well, with directions to fetch that loaf, or hand me a knife. After a few minutes, there was a plate of toasted bread embellished with sweet nectars, or nut butters, or tart fruits, all staples from the cabinets. She selected several and plated them with fruitjuice-tinged water on the side.



“Tell me, which stands out?”

I carefully tasted each, cleansing my palate between with water. She had created a distinctive shape for each flavor: wedge, square, round, triangle, strip.

“I like this one. The strip. What is that?”

She called it “trevera,”³² and explained it was a sweet nutrient expressed from the maternal glands of a burrowing scavenger. “Trevera sounds better than rat milk, so don’t tell anyone. It has a caffeine analog component that adds a little kick.” Fourth and I found it in the market; it was cheap.

“Where’s it from?”

“It’s a Zhodani thing. Some of it is exported into the Wilds. The Vargr like it.”

I reached for another, and she said I should limit my intake.

She left a full plate in the commons under a clear dome, and next time I passed through, all of her treats were gone.

Three weeks later, at the end of my watch, Captain called me to the bridge. He never does that. I was just Freightmaster. It was just him and me; First was busy elsewhere, apparently. He handed me an astrogation wafer and a slip of hand-written paper with strings of numbers and letters.

“We need to meet with a supply here at these co-ordinates. Note the time window. I need you to calculate the course.” He pointed me to an alcove with a console, and went back to whatever occupies a captain on a bridge.

³² The word appears to be Gvaeg, one of the major Vargr languages.

First, no one puts co-ordinates on paper. They are too prone to transcription error. A memory stick is much more dependable. This was clearly something pushed across table, folded, safe from prying sensors and scanners. It wasn't a printout from a computer; someone had laboriously copied it to ensure it was not in some data bank. I hoped it was right.

I inspected the wafer. Made sure it was marked SDEIES, which it was. Now was not the time for a wafer mismatch. I moved it to the nape of my neck, and I felt the magnets pull. Now the strings of alphas made sense.

I saw why he didn't ask First. She handled standard intersections³³ fairly easily, but this was of a complexity that was probably beyond her abilities. We needed to break out in deep space, far from any gravity source, with a specific vector, and in a specific time window. There was more: our self-identifiers needed to be broadcasting specific sequences. Our attitude had to be at a specific angle to our vector. They even defined "up" for us.

I set to work, touching tabs, setting parameters, entering the digits. I was aware that I was being meticulous,³⁴ checking each digit with my finger on the paper, and then on the display screen. Graphics and diagrams showed our complex course through jumpspace and a corresponding analog through realspace. If anything larger than us somehow impinged on our course, it would collapse our wave functions. My job was to select a line that didn't. I finally was satisfied with my settings and triggered calculate mode. Now I could break for a few minutes.

I returned to Captain and gave him our required vectors and attitudes. "I am assuming an optimum 168 hours³⁵ for jump. Sixteen hours either way keeps us within the arrival window. Here's our preferred jump point. We need to be there in about eight hours. I'll have the calculations finished in six." I went back to work.

With error-checking and confirmations, it took almost seven hours. I turned over the course data and excused myself. "I need the wafer back." I had forgotten. I removed it, returned it, and retired to my bunk. He didn't even say, "Thank you."

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280-1099

Deep Space in Khoellighz Sector

³³ The simple course planning that carries a ship from its current star system to the next one.

³⁴ An astrogator should be meticulous. In this case, it is unclear whether the trait comes from within, or from the wafer.

³⁵ The accepted value for Time-In-Jump is 168 hours plus-or-minus a tenth. The variation is statistically a bell curve.

Jump was uneventful. We emerged precisely on time, on course, broadcasting friendly signals. It was as if we were standing still. Our vector matched a ship some distance away.

They didn't talk to us. Every interaction was coded signals. Captain, with electronic permissions, moved us closer. There were no markings. No allegiance symbols. No numbers. No black and yellow hashes for dangerous edges. As if an overpaint of grey could hide the lines of an Imperial Element-class cruiser.

A cargo door opened, shining a yellow glow into the black of space. I thought I saw some a few spacers, but could not be certain. Then, a stream of torpedoes marched out the port, and like a caravan of cargo beasts made their way to us.

I stood in the open hold door, vacc-suited, and gestured them enter. Beecie helped. She guided them to racks into which they settled gently.

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325-1099

Gvur 2302 Karrksinarka B886300-8 Lo Ga

A month and a half journey³⁶ took us to an isolated system.³⁷ In those weeks, Beecie and I became close. I initially found that strange. I thought that I liked small, cute, pretty girls with long hair. Replacements for my lost Silk, I imagined. Beecie was the opposite: androgynous, self-assured, not what I thought of as feminine. She spoke her mind, but listened to others with genuine attention. When she paid that attention to me, I felt important, and happy.

Our destination system³⁸ should have been populated, busy. It had a main sequence G star strangely acned with flares and spots, a pleasant mainworld satellite of a gas giant in the HZ,³⁹ even a rather sophisticated starport. And almost no people. No Humans. Maybe a thousand Vargr, clustered around the starport, doing its required tasks. I wondered why no one lived here.

Hanging in orbit were a variety of modular freighters, incapable of atmosphere. Even as we passed them, I saw activity: cargo frames eagerly grappling modules for transport to the surface. Several ships were already stripped of their goods. One moved away as we watched.

³⁶ Now near the end of the year 1099.

³⁷ Karrksinarka.

³⁸ The same system that was the site of "The Red Ship." Available at <https://www.baen.com/free-stories-2020.html>.

³⁹ Habitable Zone. Conveniently, the HZ for Humans and Vargr is roughly the same.

We were directed to a tidal plain far from the starport. That was the first time I saw those white granite cliffs, as yet unmarked, shining in the evening light.

Beechie and I watched our approach on the commons display. I don't know what I expected, but what I saw surprised me: row upon row of ships, of all shapes and sizes, colors and conditions. Many were one turret scouts. I recognized packets, traders, merchants, cruisers, frigates, and more.

"Do you see the common element?"

I said, "They have nothing in common. Literally no two ships are the same class. Does that count?"

Beechie agreed that it did. "So, other than that."

I looked closer and then shook my head.

"The ships are all different, commercial, naval, local guard, enn-gee-oh,⁴⁰ merc,⁴¹ even a few that look like privateers, and they are all fully armed. Every single hardpoint on every single one of them is turreted. Normally, even in the Wilds, some of those hardpoints would carry sensors, or just be blanked over."

I looked closer. "I can't see the other side of that freighter.⁴² How can you be sure the other side's hardpoints are not sensors?"

Beechie liked to explain things, and I enjoyed the sound of her voice. "Well, first because it's stupid not to fit out hardpoints symmetrically."

"And second?"

"I asked computer, and she confirmed that they are all fully armed."

"Ah."

Warnings sounded, and we both strapped in for the final approach. Captain put us into a vacant, apparently assigned, spot on cleared bedrock. We were flanked by a shiny white multi-finned yacht that fairly bristled with turrets and a cylindrical asteroid miner with a big dent amidships. Other ships stretched out in rows as far as the eye could see.

It was now night, and we closed down. We were in planetside mode, so I made sure the hatches and ports were properly secured.

The next morning seemed like a festival. There was noise everywhere. Cargo ramps were busy loading and unloading. Scooters raced up and down the *de facto* access roads. Lifters dashed overhead. Some entrepreneurs had put up shelters and sold drinks and food and vital supplies.

We had no assignments as yet. With no cargo to unload, I had nothing to do, neither did Beechie, and so together we wandered the rows of ships, admiring their differences, noting the unusual. We bought beverages from a vendor in a tent along the road. We met

⁴⁰ NGO. Non-Governmental Organization. Not further specified here, but conceivably a charity relief organization, or perhaps a research ship.

⁴¹ Mercenary.

⁴² I recall Heinlein's Fair Witness in *Stranger In A Strange Land*. Fair Witnesses were individuals trained to see the world around them, as literally as possible, until sensed (see/hear/smell/taste/touch) otherwise.

our asteroid mining neighbor: a pleasant family with two wives and ten children ranging from infant to young adult.

After some time, Beecies' comm buzzed, as did mine, and we returned to the ship. First had shipboard assignments for both of us, and we set about our duties.

Early the second morning, Captain called me to the bridge. He handed me a tablet with a local map and instructions. "Higher⁴³ Command wants to talk to you."

"Whatever for?" I asked.

"We have not a clue. See me when you get back. As soon as you get back."

I stopped by the ship's locker on the way out and selected a small pistol and a shoulder holster to carry it concealed under my jacket.

Higher Command was some four kilometers distant, down our particular lane and then over a row. It proved to be a cleared area with a massive freighter swarmed by workers, and over to the side a dark green armed merchant with black trim and surrounded by portable shelters. My tablet led me to Shelter 3. The clerk asked some basic questions and directed me to a nearby desk.

I was surprised⁴⁴ to see a Vargr in a brightly colored uniform jacket. He spoke with a natural growl undertone.

"We need you on an inspection team. Can you do that for us?"

"I've never done that. I don't think I am qualified."

"You have a jack, do you not?" I understood, even as I answered yes. "We have a wafer for you with all the requirements." He pushed a folder across the desk surface. "Show me your tablet." He bumped mine with his, and they both chimed. I knew that now mine contained a full packet of instructions.

I opened the folder and examined the wafer, including the label coded SDEIEC. I started to put it back and then re-examined it.

"One moment. This won't work. I need an SDEIES."⁴⁵ I showed him the wafer.

"It will work."

"No. It won't. The codes are wrong."

The Vargr barked an order and a clerk, also a Vargr, raced over and stood deferentially, eyes averted, as they conversed. The clerk left.

"It will be a few minutes."

"I appreciate you correcting the issue." There was a silence that made me uncomfortable, and I tried to think of something to say.

"I was recently introduced to trevera." Somehow that comment found common ground between us. He inquired as to what variety, to which I responded I had no idea.

⁴³ Normally, the peak of a military organization structure would be High Command. Higher Command vaguely implies that there is a Highest Command somewhere.

⁴⁴ He expects everyone in authority to be Human.

⁴⁵ SDEIEC is an appropriate wafer for a Vargr; SDEIES is appropriate for Humans (and some other genetically compatible species).

There followed perhaps ten minutes of animated lecture on the varieties of trevera based on the donor animal's diet and environment. Rozlo, Eava, Spun. The superb Kolruz. The overrated Oulla.

At some point, I interrupted. I confessed that I did not know his name.

"Sagsoukhthoektaz. My personal name is Taz."

"I am pleased to know you Taz. My name is..."⁴⁶

"I have it here on my screen." We both laughed, and were interrupted with the return of the clerk with a corrected wafer. I confirmed that it was labelled SDEIES and expressed appreciation for his help.

I returned to the ship and told Captain of my newly assigned duties. He grumbled, but merely told me to keep him informed.

That afternoon, I met with a small group at Higher Command. We introduced ourselves: two Vargr named Shin and Fen, two Humans named Ank and Dennis. Our leader checked that we had wafers. He distributed tablets—a strange model with integral sensors and scanners—and answered questions. We bundled into a waiting scooter and set out.

Our first assignment was a well-armed merchant named *Resourceful*. We waited outside while our leader made the initial contact with its Captain. When he returned, we all inserted our wafers.

I felt an urgency I had never felt before in my life. Literally nothing seemed more important to me than this particular task of the moment. I touched spaces on my tablet and it sprang to life. Around me, my comrades did the same.

I knew the deck plan configuration of the *Talent*-class of merchants. That its building shipyard had a reputation for sloppy construction. That the wing spars were prone to cracks. A hundred other facts lurked in the back of my mind, waiting to be called to life. We entered by the main cargo door and immediately broke off to different parts of the ship. I needed to inspect the cargo hold, the six turrets, and fire control. I even knew the optimum path through the ship.

Resourceful's Freightmaster followed me and asked questions, alternatively proud of his domain and worried that I would find fault. I told him to send the gunners to their fire control consoles; that I would visit them next. I discussed my inspection as I walked. My purpose was to ensure readiness, not to simply criticize. The tablet sensed for leaks, electrical faults, problems with fluidics and photonics and magnetics, and it occasionally found them. My narration reflected both positive and negative. "Fluidics reads very good. I am surprised; these *Talents* often leak in their corner fittings."

"Thank you. They were replaced last overhaul."

I saw that the hold was filled with torpedoes much like the ones *Lady O* held, although of a less sophisticated model. Freightmaster said they were arrayed for launch through an open cargo port and then self-guided to seek out specific targets. I noted they

⁴⁶ Notice that the name of the central character is never stated. Indeed, the crewmembers of the *Lady O* are always referred to by rank or position. The named characters are Silk, Beecie, the Lady Seldrian, Taz, Shin, Fen, Ank, Dennis.

this stowage plan was more efficient than our own; then again, ours were for delivery to someone, rather than direct launch.

I interviewed each gunner at his (or her or its) targeting console. The tablet administered a brief reflexes test—tapping randomly appearing colored dots—and recorded the results. Somewhere, the master battle plan would now have data on performance expectations.

And then were we done. My fellow inspectors met at the main port, gave preliminary results with a promise of a more complete report in a few hours.

We inspected six ships before end of day, and another fourteen the next.⁴⁷

I was finally released from inspection duty and returned to *Lady O* to find that she had also been inspected, and a report detailed our own required remedial actions.

The next day, Captain told everyone our ship's assignment was in place and that we were simply biding our time. He gave a general presentation, telling us that this system was infested with swarms of Black Ships that needed to be eradicated. He stumbled over why, apparently unclear on that point himself. He emphasized that we were operating in a resupply role.

No one warned me that Beecie was leaving; transferring to a gun cruiser. I saw her across the cargo deck. She dropped her bag and gave me a hug. "I have enjoyed our time together. It's been." She hesitated. "More than fun. I'll miss you." And she was gone. I never saw her again.

Our computer told us what we were planned to do. It would send us to a specific point where we would reload someone with our torpedoes and some other supplies. Actually, the computer contained almost the entire battle plan: our enemy and its probable lines of attack; our own ships and who was on them; goals; potential problems.

I searched and found Beecie rostered on a Vargr *Fang*-class cruiser. It even showed her turret assignment.

For the moment, I had lost all motivation, and retired to my bunk. I watched an entertainment for a while, until I realized that I had no idea what it was about. I closed my eyes, and slept fitfully.

The next morning, I went to work in the hold, checking tie-downs and clamps, making sure we were ready. Mid-afternoon, Captain announced by voice that there would

⁴⁷ This is a fairly quick pace. Six in an afternoon is perhaps one an hour. Fourteen in a day is a similar rate. None of this counts travel between ships; I would assume, for efficiency, that inspections were scheduled for adjacent ships.

be final instructions at 1900;⁴⁸ my comm buzzed with the same in text, and I saw my console had a similar message.

This was important enough that we assembled in the commons with its large display. Fourth had made a plate of edibles. They looked like Beecies' treats, but didn't taste the same.

Our leader was the Lady Seldrian, daughter of some noble back in the Imperium. She stood flanked by two officers, one Human, one Vargr. The Human spoke first and said in general terms that we were tasked to eliminate a threat in this star system. The Vargr then growled and barked what I assumed was the same message.

Then the Lady stepped forward. Through our transpex, I could see that no one was moving on the great tidal plain. Those few who were not in their ships stood still, looking at their comms. Her words were straight to the point.

"I am Seldrian," she omitted any title or rank, and I know that in our position-conscious society, everyone noticed. "And although I do not know most of you, we are today comrades, sibs-in-arms, and friends for this task. We cannot be less.

"All that you ever have done, and all that you ever will do, counts as nothing against what you do have to do now.

"The fate of the galaxy lies in our hands. I call on you each, as friend and more than friend, do your best, nothing less, do your best, do your best.

"Years from now people will say they wish they had been here today, to see what you will have seen and do what you will have done."

Lady O's assignment was missile resupply for Second Squadron. We took up station just beyond the ring of Areaz, the gas giant in Orbit 2, and waited. One can maintain a high level of readiness for only so long, and after a full watch, Captain sent most of us to bunk, or meals, and established a roster.

I couldn't sleep. I switched with Steward and stayed awake. There was nothing to do, so I followed battle reports on the console.

The target swarms were located on charts, and Higher Command had timed our attacks to be near simultaneous. The reports I saw were staggered by light lag. I was especially interested in the progress of *Fang*.

Something nagged in the back of my mind, like a dream that set my heart racing, but then lacked coherent detail as I tried to remember. I had experienced this feeling before.

⁴⁸ As military time on a 24-hour clock, this is about 7 pm.

At the next opportunity, I passed by my bunk and found the inspection wafer, inserted it, and returned to my console.

Apparently, the skills for the wafer had been too quickly, or perhaps inadequately, edited and some peripheral memories remained. I turned my mind to those fleeting thoughts and they erupted. This skill donor had attended a briefing about the swarms, and it was his memories that emerged.

Our targets, those Black Ships, were some sort of organic structures, their origins obscure, their motivations equally obscure. This briefing covered their life cycle.

A Black Ship arrived in a system and immediately shed dozens or hundreds of daughters who scatter to scoot about for generations, or lifetimes, visiting asteroids, comets, gas giants, and planets harvesting specific minerals and caching them like honey. In the process, the Black Ships multiply and produce even more caches.

This process continues until the cache quantity reaches some critical value. Then, following some strange instinct, a carefully-timed sequence sends cache after cache into the star, disrupting its fusion cycle. In the final stages, the Black Ships swarm at specific distances from the star, and the last caches are dispatched to trigger a nova stage.

Now a thousand Black Ships swarm, a hundred each at ten distinct distances from the star, and they ride the outrushing blast, absorbing energy and transitioning into jump. The closer to the star, the greater the jump.

I shook my head in disbelief. I knew jump could cover a handful of parsecs. High tech naval ships might do Jump-5, maybe Jump-6. I had seen popular vids talk about Jump-9, but no one knows how to do that.

This briefing said the swarm farthest out--that absorbing the least energy--would do Jump- 1 to Jump-9. The next swarm in would do up to 10 squared: 10, 20, 30, 90 parsecs. Did my mind made the extrapolation, or was it the wafer? Ten distances. If distance 2 was 10 squared, then distance 10 was 10 to tenth. 10, 20, 30, 90 billion parsecs. The edge of the visible universe is 14 billion parsecs. Some of these Black Ships would, after a week in jump,⁴⁹ be beyond the edge of the visible universe.

I am sure that my own mind constructed the inverse: these swarms conceivably came from beyond the edge of the universe. I paused that concept as the replay of briefing continued in my mind.

A hundred Black Ships would randomly scatter to a hundred locations within ten parsecs. Some would arrive in deep space, fail to find resources, and die. Those that reached other systems would probably take root, and then across many of their

⁴⁹ A characteristic of jump is that, regardless of distance travelled, time elapsed in jump is about a week.

generations, explode those stars. The briefing estimated that interval at three thousand years.

Another hundred would scatter to locations within a hundred parsecs: theoretically reaching all of the Spinward Marches, indeed all of the Domain of Deneb.

Yet another hundred would fly up to thousand parsecs. One could reach VlandHome,⁵⁰ or Capital,⁵¹ or Terra.⁵²

Some would fly ten thousand parsecs and reach the core of the Galaxy.

It was cold comfort that some would die in intergalactic space. Some would reach Andromeda.⁵³ Some would reach beyond.

What is the chance that one of these Black Ships would destroy Terra? Is it any less of a threat that that potential destruction was three thousand years in the future?

I reached up and removed the wafer. My heart raced, and it was again like a nightmare that I couldn't remember. Who could I tell? What would I tell them?

Second Squadron engaged the Areaz Swarm some light seconds from us. Through the transpex, we saw only flashes of light. The displays gave more detail and First shuffled through a variety of viewpoints: specific ship visuals with an identifier in the lower corner, recon drones providing a more encompassing view, and an occasional fighter chasing, or being chased. When a Black exploded, a few cheered; when one of ours was hit, there were gasps.

⁵⁰ Although Earth (or Terra) is generally acknowledged as the origin of Humanity, Vland is the homeworld for the Imperium and its predecessor empire reaching back some nine millennia. Vland is about 100 parsecs distant.

⁵¹ Capital (the capital of the Imperium) is about 150 parsecs distant.

⁵² Terra is about 300 parsecs distant.

⁵³ The Andromeda Galaxy is the nearest major galaxy to the Milky Way. It is about 770 thousand parsecs away.



The battle took many hours. First occupied herself knitting. Fourth brought out a bowl of toasted grain and some sauces. Other napped, or read, or browsed screens.

I made my way to an auxiliary console and found *Fang* and her comrades chasing a pod of Black Ships: a large central ship at the center of a cloud of smaller. At some point, the Black Ships slowed and turned to face their chasers. There was a cacophony of bright flashes followed by an all-out assault. Ramming. Crashing. Explosions.

Some minutes later, many consoles flashed red and sounded alerts. First checked the notices and said, “Change in plan.” The subject of our resupply no longer existed. We needed to move closer to the swarm and launch our load of torpedoes ourselves. We were, apparently, no longer a noncombatant.

Our torpedoes were a strange lot. Their identifiers carried experimental-prefixes. They were supposed to be self-aware, self-guiding weapons, driven by tiny circuit brains derived from, in this case, hornets. They lived in a fantasy world constantly engaging simulated targets and rewarded with pulses of joy when they succeeded and jolts of pain when they did not. All during our journey, all during their lives, they had been honing their skills to a fine edge.

I wanted to ask Beecie to help, and realized that was impossible. Instead, I literally grabbed Fourth and dragged him with me to the hold. Remembering my inspection of *Resourceful*, I gave some repositioning instructions even as I was running diagnostics on the closest torpedo.

There was a mutiny.

The torpedoes didn’t want to do the mission. I have to say that I understood: it was certain death. But understanding did not persuade me.

I touched a tablet to the nearest warhead and scanned diagnostics, lists of immediate action, repair sequences. If we had spare brains, I could have simply swapped out new for

old. I could flip a switch and make them simple homing torpedoes, but that would almost certainly fail.

Finally, the checklist included a footnote. A technician could wafer transfer to the warhead for a test drive. It was an experimental process, and the transfer begins to degrade immediately. It might work for a few hours, but then became increasingly unreliable. If it worked, after the test drive, the tech could wafer transfer back and report, or understand, or adjust the torpedo.

I killed the mutineers with a touch of a button. Time was all important. I literally yelled at Fourth to pull the access wafers from each of the torpedoes. He was technically my superior, but responded without question. He dumped a handful on my console, and I carefully touched the first to the nape of my neck and felt the magnets pull. I mentally saw a series of disclaimer and warning screens that I accepted. I felt a momentary dizziness, saw a completion text screen, and removed the wafer. Somewhere in there I told Fourth what to do. As I completed each wafer, he ran to torpedoes and reinserted. I had to be careful not to confuse new and programmed wafers.

With the last one done, I gave a final instruction. “Move to the commons and evacuate the hold.” I was dizzy and stumbled. Even as we moved, the torpedoes were lifting from their cradles and toward to main cargo door.

I realized that I could fly. That I was flying, floating above the deck. I felt the presence of others just off to the left and right and up and down. The cargo doors parted, and I moved forward, through, and out.

I could see in all directions at once. Over there was the ringed gas giant, its orbit traced as a solid green line. I saw its satellites and their coded orbit lines. The *Lady O*. A few other ships. A swarm of the Black Ships. I could literally shift my point of view and look at them from within the swarm.

Now one of the Black Ships was haloed in orange, targeted by a fellow torpedo. Successively, others were targeted, with attached identifiers... alphameric from 1 to Z.⁵⁴ I knew that I was M. I picked one, found it already targeted, and switched another nearby.

Even as I took all of this in, I was accelerating toward the swarm.

There was very little communication between us, at least on the verbal level. We all knew the same facts and had the same purpose. We shared our sensor inputs, and if need be, I could see through anyone else's eyes. I realized that I was both inside my specific torpedo, and observing from a disembodied far.

⁵⁴ There are 33 identifiers between 1 and Z: 10 digits and 24 letters (I and O are routinely omitted to avoid confusion with 0 and 1).

We flew in a triple vee formation: three sections of eleven. I felt comfortable farther back on the right wing of the second vee. All thirty-three of us were identical, literally the same, and we worked together easily. On the other hand, from the moment we began, we began to diverge. The apices of the vees took control and led; others of us followed.

One hundred and eight Black Ships were even now boiling out of the inner ring, each surrounded by an entourage of smaller hulls. Those we could ignore. We needed to concentrate on the ships above a certain size, essentially as big as our own ships.

Behind us was our squadron—some forty ships—already firing sporadically at targets of opportunity.

Gradually, my comrades found targets and dove in for the kills. I felt a stab of pain as each perished, accompanied by a joy of shared achievement. I didn't usually think or feel like that, and I concluded it was part of the reward/punishment circuits in the system.

Our squadron scored many kills, but so did the Black Ships. I worried about *Lady O*, but it was clear she was beyond the battle area, on station above a nearby moon, and relatively safe.

The Black Ships were not sophisticated adversaries. Each ship-sized hull flew in formation with a gang of smaller fighters and even smaller missiles. As they approached us, the main hull would sparkle and flash and its cohort responded. After a few attempts, they all sparkled in sequence. Only then the black missiles dashed forward to impact their targets. Targets that survived were attacked by the fighters. Any that survived still became the object of a ramming attack by the big hull.

There was one level higher. The central ship on the group was not black but red.

Why it targeted *Lady O* I do not know, but it did. I could see that it dwarfed our ship, and that a ramming attack would scatter us in pieces. I was simultaneously desperate and coldly calm.

I raised my acceleration to its limit, and then in a burst of deceleration placed myself between it and us. In the center front of that vast red hull was a mouth, rimmed with glistening red teeth. I plunged directly into that maw, down that throat, deep inside. My plan was simple: detonate deep within for maximum damage—far more than I could inflict from a surface explosion. My vision sensors were dark, but others told me relative position, depth, density. As I reached a figurative hand to self-destruct, I recognized a set of options, and chose them in quick succession. I set a timer, triggered a release, and forced my way forward through that long alimentary canal, ultimately to a sphincter that blocked my way. With one final push, I forced my way through, my now blunt,

warheadless front scraping layers of alien skin: a minor wound, but a foretaste of that to come.

I broke free and accelerated. The timer in my mind counted down three-two-one, and I saw and felt and sensed the explosion that literally ripped that Red Ship in two and more than two.

And it was over. I made my way back to *Lady O*. The cargo door was already open, and I made my way in, to rest in a waiting cradle, and shut down.

**

I inserted the wafer and the pain was excruciating, but only lasted a few seconds. Memory washed over me, and I remembered every minute of my experience in the torpedo. If I thought hard, I could correlate it with simultaneous events at my console. But it really existed as a separate experience.

Meanwhile, reports trickled in about other squadrons' experiences: their defeats of other swarms, and their destruction of other caches.

Higher Command released some ships with thanks and credit vouchers, while assigning some of our survivors search and rescue missions, but with little success.

After several days, the Lady Seldrian appeared on our screens and expressed her pride in our collective accomplishments. It all felt hollow to me.

The next day, Captain said we had a new task. "The casualty list is complete. We are tasked to carve a lasting memorial to those who died."

"I don't understand."

"We are staying behind for a few days. We're supposed to laser-carve the casualty list in granite."

I still didn't understand. Some two thousand people had died stopping this alien menace, literally saving hundreds of worlds from destruction, and their memorial would be some stone tablets carved with their names. I excused myself and retired to my bunk and slept for two days.

When I returned to some semblance of caring, we were back on the tidal plain before the white granite cliffs overlooking the Sea of Green. I heard sounds and felt vibrations, but ignored them.

I made my way to the commons to find Captain and First and Steward and Medic conversing. "Welcome back to the realm of the living! Medic here says you are none the worse for your experience."

Medic added, "Physically, I mean. I think you probably need a few sessions with Counsellor."

I grunted.

“Did you know you are on the casualty list?”

“No,” I answered with a questioning lilt.

“Apparently Higher Command classified your wafer experiences as death. There were a couple other similar situations. You flew thirty-three torpedoes, and thirty-two died in the battle.

“Here, look at the memorial.” He led me to the transpex, and I now understood the sounds and vibrations. Two of our dorsal turrets were operating together, carving names in immense letters on the white granite cliffs. I could read them even from here, two kilometers away.

**

The *Lady O* wandered through the Wilds generally rimward. The worlds of the empire lay ahead of us, and it still took almost a year.⁵⁵ The charter fees had replenished our accounts, and we posted a modest profit for the remainder of our journey.

Nevertheless, I found that my heart was no longer in the bi-weekly cycle of loading and unloading cargo. When we called at Regina, I cashed in my shares, made my farewells, and returned to a planetside life.

After a few weeks of idleness, I found an instructorship in remedial history at a feeder college,⁵⁶ which was enough to meet my expenses. I enjoyed the work, talking to students and impressing on the importance of learning from the past.

After a semester I filled a vacant position at the University of Regina. Student evaluative responses, and a lack of interest by other professors led to a more permanent position. My specialty was Imperial-Vargr relations and the general interaction of the Imperium and our neighboring Wilds.

Somewhere in there, I made a misstep and alienated an administrator. He spoke disparagingly of history in general and of Vargr students in particular, and I took exception. My response was an almost verbatim quote of Beecies’s words to Captain, and it did not go over well. I was told that students needed to conform to our teaching methods; that the reputation of the University would not be cheapened by coddling special students. I saw that my logic and well-crafted arguments would not prevail, and I let the subject drop.

One consequence, however, was that my applications for research grants were universally rejected. I wanted to continue collecting and correlating the histories of the many Vargr worlds, and that required actually visiting them; our own archives were terribly incomplete. With each reapplication came a new set of requirements or

⁵⁵ Arriving in the Regina system in 1100. By the most direct route, the journey is perhaps 21 jumps or about 42 weeks.

⁵⁶ A community college or a junior college.

restrictions or excuses, and so I found myself teaching courses that interested a specific universe of students but seemed to actively displease the administration.

**

157-1104
Spin 1910 Regina A788899-C Ri Pa Ph An Sa Cp
University of Regina Campus

My calendar⁵⁷ showed me a routine notice of dedication ceremonies for the new Center of Science and Technology. My position does not merit an invitation, and I was relegated to the third row of the crowd behind a colored ribbon at the edge of the promenade. I was tall enough to see over their heads, and so I watched for the dignitaries.

Initially, there was only a drumbeat, the ceremonial cadence for such processions. Then they came into view: the University President on the right; the Provost on the left. I strained to see the person in the center. She is short, thick, heavy-boned. Her characteristic hair was awkwardly cropped. I would recognize her with only a glimpse at a distance in any crowd. The Lady Seldrian.

I strained to see as they passed my location.

The Lady stopped, and it took two steps for the drummer to notice and pause his beat, and then for her companions to halt as well. She turned, looked in my direction, and walked directly toward me. Before her, the cordon somehow dropped, and the rows before me parted. She was a full head shorter than me, and craned her neck upward as she took my hand, shook my hand, and said some few words, “Friend, I am pleased to see you again.”

She then returned to her place, signaled the drummer, and continued in step with his beat.

Someone nearby asked me what she said, but I ignored him and made my exit.

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158-1104
Spin 1910 Regina A788899-C Ri Pa Ph An Sa Cp
University of Regina Campus

The next morning, after my first class, a runner was waiting with a summons to the Administration Building’s Forty-Ninth Floor—the President’s Suite. The runner emphasized that it was urgent, and insisted on accompanying me. Paradoxically, when I arrived, I was told to take a seat. I waited for a quarter of an hour, fidgeting, worrying. I heard the occasional raised voice from the inner office.

⁵⁷ The date is mid-year 1104.

At last, the secretary gestured to the overlarge doors, “The President will see you now.” It was actually the President and the Provost.

“Welcome. Welcome. Please, be seated.”

Something, contrariness perhaps, led me to instead walk the several steps to the floor-to-ceiling panels overlooking the sprawl of Corona City and the Eastern Sea beyond.

Behind me, I could hear hushed syllables.⁵⁸ Then the Provost spoke. “We were unaware that you were acquainted with the Countess.” He paused, intending that I fill the silence with an explanation. I still felt contrary and extended the silence. “Perhaps a family connection?”

I was enjoying this. I would probably lose my job, but I was enjoying this. At last, I turned and shared. “We are friends. Long ago, we worked together. But that was long ago.”

The President spoke. “The Lady inquired about you yesterday. I confess, I was unprepared and did not give an adequate answer. I have examined your situation, and I find that your department chair has ill-treated you. He has been chastised, and his chairmanship will not be renewed.

“Further, his disapproval of your grant request has been reversed. At the Countess’ request, Naasirka⁵⁹ has funded your exploratory research grant.

“It is renewable funding. With your approval, we propose to elevate you to Travelling Research Scholar, while continuing your association with the University, of course.”

The Provost shared a tablet screen with an executive summary. It reflected my most recent research grant request: a generous stipend, travel funding to include a ship, and supplies, and added a Scholar title to be upgraded to Professor once my advanced degree was completed. More than I had asked for; certainly more than I had ever expected to be granted.

“We would like to report to the Lady that you are happy with your situation here. We’ll take care of that.” To control the narrative, I assumed.

“Let’s just take an image of you assenting to your new status.” I touched the proper location on the tablet. The Provost imaged me and the President touching hands.

Should I trust them? My satisfaction was a small cost compared to what they received from their patroness. If I received half of what they promised, it would be worth it.

⁵⁸ How do administrators handle an issue like this? It turns out that a lower level instructor has been treated with a minimum of respect, and then they discover that he apparently has friends in high places.

⁵⁹ Naasirka is an Imperial megacorporation with products across a wide range of interests. It produces entertainment wafers, starships, and just about everything in between.

Our small talk after conveyed that they expected me to begin my researches immediately. They had arranged a replacement for the last few weeks of my classes. My office would be cleared. I had no further responsibilities on campus. They were clearly happy for me to be gone.

112-1105

Gvur 2302 Karrksinarka B886300-8 Lo Ga

I hurried, and even then my journey took almost a year.⁶⁰ In that time, I learned the details and features of my ship. With wafer knowledge, I tuned and adjusted its mechanisms to near perfection.⁶¹ Although the wafer knowledge left me, its effects remained in the gleaming drives and magnificent devices. Although my ship seemed static, I knew it was racing across the Wilds at five hundred times the speed of photons.

At last, I reached that yellow starsun no longer suffering from red spots and streaks, and with it the planet I remembered. After so much time, I was impatient, but I nevertheless checked my safety harness⁶² and the telltales on my lifting belt. With my ship parked on the tidal plain, I stepped into the air and rose to those double man height letters burned all over those cliffs. I swept past the section with my names, suffixed with torpedo designators some thirty-two times. They didn't matter. My goal was higher up.



I rose past the few names I knew. Taz. Shin. Fen. Ank. Dennis. In some cases I recognized the full crew of a ship in a cluster.

⁶⁰ Regina to Karrksinarka is 56 parsecs, 21 three-parsec jumps. Under standard travel protocols, about 42 weeks. The date is year 1105.

⁶¹ Many smaller ships can be operated by one person, especially if appropriate wafers are available for special tasks.

⁶² Safety first.

At the very top of column twelve—of some forty such columns—I found the name I sought, and maneuvered myself into the lower portion of the B. My back fit perfectly into its curve. From this point a thousand meters up,⁶³ I could see far out across the Sea of Heroes. Below, my ship was a mere speck.

From a pocket, I took a preserving container⁶⁴ and withdrew a still warm trevera and marshfruit jelly sandwich—it has to be on whole grain—and took a bite as memories flooded over me. I made myself eat slowly, savoring each and every mouthful. And when I was done, my new lifework began, and I stepped off into the abyss.⁶⁵

⁶³ The white granite cliffs are at least a thousand meters tall. In comparison, El Capitan at Yosemite is about 900 meters. Even with a relatively sheer rock face, the carving task requires smoothing the face (or possibly several panels) and then carving the names. The adjective describing such a project is monumental.

⁶⁴ The benefits of high tech consumer society, clearly.

⁶⁵

“When you get to the end of all the light that you know and it’s time to step into the darkness of the unknown, faith is knowing that one of two things will happen: either you will be given something solid to stand on or you will be taught how to fly.”

— Patrick Overton
(often misattributed to Edward Teller)