# **Tech System 591**

Chapter 591 Commander's Log, Day 115

Aboard the TSF Proxima.

Commander Takahashi Ayaka of the Terran Exploration Fleet yawned and stretched in her chair. She looked out the window at the unrelenting black... nothingness outside the cityship TFS Proxima. While they were in warp transit, the exploration fleet and escort vessels were docked in the cityship's cavernous docking holds, their crews disembarked and quartered on the cityship itself.

The quarters were decently sized, at around four meters by six with a reasonably high three-meter ceiling, but felt cramped. They each had their own restroom and bathing facilities—really just a sonic steam shower that gained in efficiency what it lacked in relaxation—as well as a small pantry and "office space", such as it was. That didn't leave much room for more than a regular rack and a stasis pod that doubled as a VR pod.

Not that the cramped conditions mattered, really, as they could simply opt to spend the journey in stasis, or take advantage of their own little home space in the virtual city that was provided by the cityship's quantum superclusters.

She shivered at the sight of the void from her window, suddenly recalling that all that separated her from the hostile space in the warp bubble was a five-centimeter-thick pane of armorglass set into the three meters of composite armor that made up the exterior skin of the cityship. It did provide a nice seat for entertaining guests or simple relaxation, but... she couldn't. She just couldn't use it, even though she knew beyond a shadow of a doubt that the armorglass would hold.

She'd run the numbers herself during training, and again every time she had this same invasive thought. The math mathed, and the armorglass could stand up to anything short of an impact in the range of that delivered by a fifty megaton nuclear warhead.

With a brief shiver, she turned her attention back to her old-fashioned physical computer and pulled up her log. She would write her daily log entry, then head into her VR space for some proper relaxation.

'Commander's log, day 115.

'We're currently... somewhere, I'm not sure exactly where. I don't have astrogation access, so of course I don't know; right now I'm nothing more than supernumary cargo, since my ship is docked. But what I do know is that, wherever we are, we're about two months away from Proxima Centauri, where we'll finally undock and get on with the mission assigned to us. Supposedly, Proxima Centauri b is in the Goldilocks zone and we know there's liquid water there, so the Powers That Be want us to check and see if it's inhabited.

'I've almost—almost—become accustomed to the void that surrounds us during travel. It's something I never could've imagined, being flung through... not-space at warp ten, protected only by a thin layer of violations of the laws of Einsteinian physics. I love my job, I love my service, and I love my species (well, most of them

anyway), but I have to admit that the void just gets to me. I forget who it was, but someone said that staring at the void means the void can stare back at you, and I think he had a point.

'The cityship Proxima dropped out of warp today, as they do every five days, to do... something, I'm not sure. But whenever we bring the warp bubble up or take it down, the lights are positively fascinating. It's hard to describe in words, really. Just something you have to experience for yourself. Just imagine every color in existence mingling and flowing together and separately, almost like the reflection of an oil slick on the surface of clear water except... more. I'm pretty sure some of those colors don't even exist in realspace.

'I remain, as always, committed to the Takahashi name. We have a long tradition of service and duty, and I cannot, no matter what my family thinks of me, whether as a child or as a woman, fail to uphold that tradition. Let the void gaze upon that since it's such a voyeur! Hmph!'

With a final press of the enter button on her keyboard, Ayaka's daily log entry was complete. Not that she had any other duties to perform, nor was her log anything approaching official or required, but if she had the opportunity, she would send it home for her family to read. After all, they must miss her by now, she was sure, even if it was only because her escape and flight to the exploration fleet had taken away her father's chance at selling her to some greasy businessman to cement the Takahashi business empire through a marriage alliance.

She yawned again, then rose and stripped. It wasn't like the void would give a shit about her body, no matter how attractive others may find her. And she had to admit, she was definitely a looker. She had a traditionally beautiful face, with wide cheekbones tapering to a narrow chin and smooth, ivory skin. Her eyes were almond-shaped and so dark they were almost as black as the hair that fell from her head to her waist like a luxurious silken waterfall. Though her bust was modest, at a rather generous B-cup by fleet standards, it fit well on her slender, petite form and, when viewed from the side, it presented a perfect "S" curve from her front to her perky, toned ass.

She kept in shape through a rigorous exercise program consisting of karate, judo, and kyuudo (Japanese archery), along with the naginata. By avoiding more traditionally "hard" exercises, like lifting weights, all 152 centimeters of her form was whipcord strong without losing its soft, feminine shape. Standing straight on and facing her mirror, she rested her hand on her flat belly and looked herself up and down, noting with some pleasure that her secret garden was still well manicured, trimmed close to the skin and shaped into a narrow triangle above a perfectly bald slit.

Nodding in satisfaction, she turned and padded to her pod, where her VR space awaited her. Without the computing power available to maintain a time dilation in the cityship's VR, or a space the size of the public VR available on Earth for that matter, she treasured the private area she did have.

Everyone in the task force was provided a private space commensurate with their rank, where they were virtual—no pun intended—gods and could shape it however they wanted. As a full commander, she was entitled to 150 acres of space, which she had turned into a classical Japanese tsubo-niwa, with the rest of her space divided between a riding course with its own stable and a botanical garden filled with flowers, fruit trees, and tea trees.

She had been raised by a very old-fashioned family in Japan, and growing up she had been taught that women were somehow less than, and that the only acceptable tasks for a lady were arranging flowers and brewing tea. Her father even disliked his family's martial heritage, though the Takahashi ancestors had been very explicit in their family law about every Takahashi—man and woman alike—being capable of defending themselves from aggressors both foreign and domestic.

It was understandable, the Takahashis being able to trace their lineage all the way back to a samurai clan under Nobunaga Oda, and later Toyotomi Hideyoshi, but Takahashi Kazuki still didn't like it.

### Chapter 592 NEET

Ayaka stood panting in her dojo, wiping the sweat from her brow that threatened to drip down into her eyes and blinking away the sting of some that already had. She bowed to her virtual sensei, then racked her naginata and began the logout procedure to return to the real world.

She had been in the middle of an intense sparring session when a soft, but insistent chime had sounded to inform her that someone was at the hatch of her quarters aboard the TFS Proxima. At first, she had been confused—why would someone be looking for her? She was basically just glorified cargo with no duties, after all. But then she remembered... him. And she thought, 'Yeah, it's definitely him.'

The "him" to whom she was referring, even in her thoughts, was the only downside to the otherwise almost fairytale she had been living since escaping from her overbearing father and too-soft mother. Lee Joon-ho, also known as the bane of her life, was an eighteen-year-old awakener from what used to be North Korea, and he was deeply fascinated with her. He was also who the exploration fleet had partnered her with for away missions, since they, in their infinite wisdom, had decided that an awakener had to be on every one of them.

But not as commanders; oh, no, never as the commander of the mission. Due to the ages involved, they couldn't be trusted to command missions. And in Ayaka's not-so-humble opinion, they couldn't be trusted to command a toilet brush to clean a toilet!

To be fair, though, Joon-ho was the only awakener she had ever interacted with, so perhaps most of them were reasonable, well-adjusted people and she was simply being ungracious by lumping them all in with the Terrible Teenager.

The soft chime sounded again, interrupting her thoughts. She looked at the countdown timer and almost—almost—swore. "It's only been twenty seconds!" she mumbled to herself, aghast once again at the impatience of the... the CHILD she assumed was at the door to her quarters.

Not that one of his general failings was impatience, though. He was... indolent, she supposed the word was, in all of his duties. If politeness and manners had been any less thoroughly drilled into her, she would have called him lazy, self-absorbed, arrogant, and any number of other less-than-flattering appellations.

But she wasn't a rude person, so she didn't.

She firmly clamped down on that train of thought as the chime sounded again and again, like an alarm clock calling her from the sweet depths of sleep. "Can you please inform my... visitor... that I'm currently logging out of VR and will be with him in about seven minutes?" she asked the empty air.

{Yes, ma'am,} the VI that acted as her personal space's butler and majordomo replied in its flat, neutral tone.

```
"Thank you."
{You're most welcome, ma'am.}
```

Lee Joon-ho continued slapping the palm reader outside Commander Takahashi's door. He'd just finished watching Kill la Kill and had an absolute, driving, all-consuming need to immediately recommend it to her. After all, she was Japanese, so she would definitely enjoy it as much as, if not more than, he had.

'What the hell is taking her so long?' he thought. 'Even if she was asleep, the chime should've woken her up by now, right?'

{Warrant Officer Lee, Commander Ayaka has asked me to inform you that she is currently logging out of VR and will be with you in approximately seven minutes,} the neutral tone of the VI suddenly said.

"Seven minutes? It only takes five minutes to log out!"

{Commander Ayaka is currently—} the VI began.

"Shut up, you artificial stupid!" Joon-ho interrupted it. "I know exactly how long it takes to log out of VR, so seven minutes is bullshit!"

```
{Commander Ayaka is—}
```

"I said SHUT UP!" Joon-ho screamed, his voice breaking on the last syllable.

```
{Yes, sir,} the VI replied.
```

Joon-ho stopped palming the door and paced back and forth in front of it, his great bulk visibly wobbling under his too-tight uniform. He'd gained weight again, and should by all rights have had a new uniform sent to him, but he was too... otherwise occupied with his new hobby to remember to do so.

He had grown up under the Kim regime in North Korea, lacking in everything that he later discovered made life worth living. But a short time after the fateful day the coalition forces of the United States and South Korea had wiped the North Korean military off the map and forcefully united the separatist states, the empire had swooped in—and he couldn't possibly be more grateful to them. He'd never known that food could taste so good, nor had he ever had access to the internet before. And that particular luxury had changed... everything.

Now he had all the food he could possibly want, and all of the knowledge of the human species was at his fingertips. He could LEARN all he wanted, and it only took him a matter of minutes to become an expert in any field he chose. Then he discovered anime, and everything changed. He became a hardcore otaku, NEET, and borderline hikikomori as he dove into the entertainment that decades of Japan's finest animators and artists had created.

Somewhere in the back of his mind, he knew that he was supposed to hate all things Japan—there was some deep generational trauma between Japan, China, and Korea, after all—but he just couldn't. Waifu after waifu had paraded past him, titillating and tantalizing his previously shackled imagination and fantasies and opening up a brand-new world for him to explore.

But then he became one of the blessed, and everything changed for him.

Chapter 593 Put Him Out of My Misery

Fortunately—or depending on who you asked, UNfortunately—Lee Joon-ho's life sharply veered back on course when he became a Three Percenter a few years ago. His mother had promptly enrolled him in the empire's Hero Academy program the instant it'd opened for signups, and he recalled her practically sighing in relief that his newfound addiction to the internet and all the wonders contained within had saved him from ending up in The Hole. In her eyes, the internet was a gateway to crime, so she had bundled him off with almost no hassle.

That said, even before the Hero Academy program had begun, he'd already received his "basic training", as mandated by imperial law. As an awakener with the power to manipulate gravity, he fell into the law category of blessings. That meant he had to attend boarding school in a private instance of the simulation while using a pod at his local cube, instead of being able to use his personal equipment from the comfort of his own home.

At the time, he had absolutely loathed being pulled away from his computer. He had even come within millimeters of losing control of his blessing, and was only saved when he saw the tears in his mother's eyes. When he saw that, it felt like a leash had jerked him up short by the neck and his incipient tantrum stopped on a dime. He was still incredibly unwilling to spend the requisite two months—virtually an entire season of anime—away from his computer and out of the comfort of his own personal space, but he did it anyway.

And it was a good thing he had, too. If North Korea had ever been interested in their citizens' mental health, they would have diagnosed him as being on the high end of the autism spectrum. But once he was in the pod at the cube on the outskirts of Pyongyang, unbeknownst to him, he was quickly diagnosed and equally as quickly cured via subtle corrections and tweaks to his thought processes. The physical changes to his brain, or at least the negative ones, that were hallmarks of autism had already been corrected during his first visit to a medical pod. But that still left the behavioral issues that couldn't be corrected as easily as running a simple regeneration procedure and genetic cleanup.

It wasn't a perfect fix, by any means, but Lee Joon-ho had come far closer to neurotypical than he'd ever been in his life. And he had no idea that anything at all had even been done to him.

Once he had passed his basic training course, and with his blessing license in hand, he'd thought he was headed for a life of leisure. Perhaps even a bit of harem building, given that he was one of the

strongest human beings ever to have lived, and surely that meant a life of wealth and luxury would soon follow.

But his mother's decision had thrown another monkey wrench in his life plan. And somehow, during the subjective years he spent in the Hero Academy, his life goal changed once again. From a borderline hikikomori and definite NEET, he had become driven and determined to work hard. In his mind, it made sense; the harder he worked NOW, the earlier he could retire and enjoy the fruits of his labor.

So he had performed well in all of his practical courses at the academy, though his performance reviews were always lacking due to "personality issues". It wouldn't do to have him too obviously reprogrammed, after all, so there was only so much the low-level AI watching over him could do to correct his issues. Thus, he was still a deeply flawed individual, with many problems, even though he was measurably "better" than he had ever been.

One may wonder, then, just why Joon-ho had been selected for his current mission when there was no shortage of people who shared all of his good qualities and none of his bad. The answer was simple: Aron was the kind of gamer who saved all of his elixirs for the final boss. In practice, what that meant was that he didn't want to send out his empire's creme de la creme on the first, most dangerous mission that humanity was undertaking outside the solar system.

So instead, he sent out those who weren't quite perfect, but had been deemed good enough despite their flaws.

"Eight, seven, six..." Joon-ho counted as he waited for Commander Takahashi to come to the door. "Three, two, one—"

Exactly as he finished his countdown (and almost as if Ayaka had been watching him and waiting for it), the door he was pacing in front of slid to the side with a swoosh of hydraulics. Commander Takahashi stood in the open hatch, dressed in sweatpants, a tank top, and a bathrobe cinched tight at the waist. Her appearance completed a circuit in his brain and he suddenly understood why she had made him wait the two extra minutes after logging out. And that particular mental image short circuited his virgin brain and he stood there slack jawed, only capable of blankly staring at the gorgeous Japanese woman in front of him.

"Warrant Officer Lee? What can I do for you?" Ayaka asked. "Is there an emergency? It's zero two hundred hours, after all." She was fairly nonplussed by the perverted expression on the teenager's face as he stared at her in silence, despite being the one who had interrupted her scheduled workout and the relaxation that would follow.

Joon-ho shook himself out of his stupor and his flabby face quivered as he squeaked, "OH... I'm here because I just watched the most incredible thing and I think you'd love to see it because it has a really strong female character that I think you'd enjoy and...."

Ayaka shook her head, wondering how the boy in front of her could talk so long on a single breath even as she tuned him out and politely waited for him to finish.

Finally having had enough, she sighed and stepped aside. "Come in," she said, then gestured for the unrepentant brat to enter her quarters. To her, the physical space she currently occupied was no

sanctum sanctorum. Her true privacy was in her personal VR space, where she would definitely not allow the booya in front of her to tread.

She sat on her bed and pointed to the window seat opposite. "Please sit. Would you like some tea?" she offered, though she was internally praying that he would turn down the offer and leave sooner.

"Yes!" he squeaked again, his voice breaking as he alternated between a furious tomato-red blush and the pale face of mortification. The joy he felt at a beauty offering him tea was offset by the embarrassment of his still-cracking voice; the extension of the human lifespan had, sadly, included extending the duration of puberty in both young men and women alike.

Ayaka gracefully rose to her feet and reached into the cabinet above the small sink in her quarters. She pulled out her tea set and quickly brewed a pot of oolong tea, then offered her "guest" a cup of it. "Have you read the information on Alpha Centauri b that I sent you yet? You must have, if you found the time to watch anime."

He could only nod like a chicken pecking at feed. The deadline she had given him to familiarize himself with what was known about their target planet was still a month away, and he was quite proud of finishing the entire knowledgebase and digesting it so early. And fast, too.

"So why didn't you report your completion of the assignment then?" she gently asked, though she was internally debating the merits of throttling the lazy sack of flab in front of her.

Joon-ho looked down and interlocked his fingers, then twiddled his thumbs. He mumbled something that Ayaka couldn't quite understand.

"What was that? I couldn't hear you."

"There's-still-a-month-left-to-the-deadline-and-I-was-afraid-you'd-give-me-more-work," he said in a rush.

Ayaka's eyes glazed over and she stared at a spot above his head. 'Please, kami-sama. Let something happen to the window, something that'll put him out of my misery.'

Chapter 594 Big Guns, Bigger Parking Lots

Mars, ARES main base.

The Sol system's fourth planet, if seen from a higher orbit, was completely different than it was in the past. Just two years before, it'd only had a population that could be counted on one hand... if you counted unmanned exploration vehicles, or "rovers", as population, that is.

Mars had always fascinated humanity ever since the species had first looked to the stars and asked themselves what those lights in the sky were. It was represented in close to a century's worth of science fiction tales, with greats like Ray Bradbury, Orson Welles, and Edgar Rice Burroughs some of the more recent people to look to the red planet and think, 'I wonder....'

So once human technology reached the barest minimum level that would allow them to explore Mars, whether in person or not, they had immediately built exploration drones, strapped rockets to

them, and threw them at the planet until one successfully survived the landing. Nobody knew what they would find, though everyone was fairly sure there would be no alien life there; the planet's atmosphere was too thin and it was too far from the Sun to allow for liquid water on the surface.

Most people, though, believed that they would find signs that life had once existed there. They stared at blurry pictures of the planet's surface until they saw shapes that "proved" life had once flourished there. Anything that could potentially be mistaken for right angles or other shapes not often found in nature was regularly trotted out as "evidence" of the existence of ancient aliens. One such person was even made into a lasting internet meme after being heavily featured as an expert guest on a television show about those ancient aliens.

And the pareidolia that humanity had evolved through hundreds of thousands of years of selective evolution didn't help, either. One of the structures on the surface of Mars just so happened to resemble a face to a disturbing degree. It wasn't actually a face, and had been disproven through virtually every means at humanity's disposal, but even knowing that it was just a mountain wasn't enough to convince the collective lizard brain of humanity of its nonexistence.

The Terran Empire's actions, however, had finally put to rest the argument over whether or not life existed on Mars at any point in its history. Short answer? No. There were signs of microbial life forms, but nothing that mankind would generally consider aliens in most senses of the word. Extraterrestrial, yes. Alien, technically. But ALIEN? No.

The empire even went, not just a step, but an entire marathon further by not only exploring the red planet, but occupying it. The age of unmanned exploration had rapidly given way to the age of the Mars base. Enormous domes that stretched kilometers in diameter were either under construction, or had finished their build phase and entered an operational state.

In other places, the ground had been flattened and poured with quickcast, a rapid-setting form of concrete that the materials scientists in Lab City had developed that could be sprayed out in liquid form and would harden in mere minutes. Not only did it set faster than even the fastest-setting concrete previously known to mankind, but it would do so in a wide range of environments that would otherwise inhibit traditional concrete from setting. It was also vastly stronger, with a tensile strength, elasticity, and hardness upwards of fifty times the previous formulas that had been in wide usage before the empire was founded.

Those giant "parking lots" were home to defensive guns that dwarfed anything previously considered even in the technologically advanced Terran Empire. Designed to reach high orbit from the surface of the planet, the gimbal-mounted gun barrels were tens of meters wide and nearly a full two kilometers long. It was a feat of engineering that could only be seen on Mars, where the gravity was only 38% that of Earth's. They were powered by enormous—even by imperial standards—capacitor banks, each of which contained enough electricity to power the entire continent of Australia for just over six months.

The defensive guns were a marvel of engineering, and the buildup on Mars was the empire's first megaproject. One of the first things the atomic printers had done, even before the ARES forces and hordes of engineers had descended upon the red planet, was hollow out the 2000-kilometer-wide solid core at its center and turn it into one giant fusion reactor. In essence, the planetary core had been reignited... but this time as a star, not a blob of molten metal.

The planet was slowly being renovated to live up to its namesake—Mars, the Greek god of war. In the very near future, it would not only be home to most of the members of ARES (and wasn't THAT an ironic mishmash of mythological figures; Mars, the Greek god of war, and Ares, the Roman god of war), but also to the men and women of the Martian Proving Ground, where classified imperial military projects would be birthed, built, and tested to failure.

Even though Aron had introduced the simulation to humanity, it was perhaps a quirk of human beings' nature that they simply couldn't trust the accuracy of any kind of program. Not where it involved lives, at any rate. So the people who had taken to Research City like ducks to water had quite happily proposed that, after they developed hardware in the virtual city, they would then bring it into reality for testing in order to verify the projects that they had developed.

Aron felt that it was more a matter of the lab geeks wanting to play with the toys they built than anything else, but he was quite willing to entertain their fantasy in order to keep them happy... and rather more importantly, productive.

Overall, the Mars base was shaping up rather nicely and was on track to be completed well under the deadline of three years Aron had given John when the project first broke ground. In fact, over three quarters of the base was currently fully operational, and the rest was more quality of life and window dressing than necessity.

The only necessity the planet still lacked was a mana-based Planetary Defense Shield.

Chapter 595 Domes, Cubes, and Tunnels

On Mars, work had already begun in the hundreds of already-completed buildings on the surface, and in the thousands of rooms beneath. One of those rooms was a cavernous chamber that housed Mars Central Command, or CENTCOM.

"Tenth ring is coming up on schedule... now," one of the technicians announced from his console. He was an ST1, or Sensor Technician First Class, and his current task was to monitor the ongoing construction and activation of sensors throughout the Sol system.

The entire front wall of CENTCOM was an enormous display, about the size of the screen in an IMAX movie theater. It was currently displaying a map of the solar system as seen from above the ecliptic, with points of interest labeled in colors denoting their operational status. Mars, for example, was surrounded with a yellow ring to highlight its partially operational status.

And with Sol as the center, nine green rings surrounded it, each of them a tenth of an AU—about fifteen million kilometers—from each other. A tenth ring was blinking in yellow, and there were dozens more rings that were still red.

The rings were sensor networks that the exploration fleet had been busy laying after completely mapping the system. Nine of them were already active, and now, with the technician's announcement, the tenth ring was finishing its self-test cycle and would soon be fully online. And with that tenth ring coming online, everything between Sol and Earth would be visible to anyone who cared to see it with the same fidelity as Nova could see it inside the universal simulation.

But the final red ring, which would be just outside Pluto's orbit, wasn't the end of the sensor network. The exploration fleets had been laying buoys as they traveled, and those buoys were seed

colonies of sensory nanites surrounded by a block of material the size of a pre-empire cargo ship. Though they were radiating out in straight lines now, they would soon become new extrasolar sensor rings, expanding the empire's reach beyond the Sol system.

It was a futureproof system that the researchers in Lab City had developed. The power requirement for q-comms was prohibitive, but within the Sol system, that could be overcome. However, outside the system, they were still limited to light speed transmission... for now. The rate that technology advanced in the Terran Empire could not be underestimated, and the developers of the system were sure that they would be able to solve the problem in the future.

And right NOW, at least, they had the perfect delivery vehicle to drop off the seeds of what would become an omniscient sensor network outside the Sol system: the five exploration fleets that had crossed the Oort cloud months ago on their journeys to explore distant stars.

The extrasolar sensor rings would take years to come online, but the empire currently had those years, thanks to Aron's foresight.

Within the Sol system, the already-activated sensor rings served a dual purpose. For ARES, they tracked all traffic and events within their sensor ranges. And for civilian traffic, they acted as a navigational aid, displaying their location on a convenient map so they didn't have to know anything about astrogation or celestial navigation to plot courses within the system.

Within CENTCOM, the analysts and technicians could see all of the traffic, while civilians were much more limited in what they could see. That was in part because their shipboard computers didn't have the processing power to track everything, but also because they lacked the clearance necessary to display certain things—like TSF ships.

On the main screen in CENTCOM, the tenth ring stopped flashing yellow and began glowing a solid, bright green. The ring's self test had successfully concluded and the "eyes" of humanity had reached out beyond what they could see yesterday. Normally, that would be cause for celebration; the network was only months old and the newness of the process had yet to wear off. But just as someone wondered aloud about the lack of champagne, the soft chime of a priority alert rang out at the traffic control workstation.

The traffic controller for the current shift spun his chair around and quickly donned his headset. "Unidentified priority traffic, this is CENTCOM traffic control. Please advise your destination."

"CENTCOM traffic control, this is Imperial One, currently en route to CENTCOM carrying Imperial Actual and retinue."

"CENTCOM copies, Imperial One. Sending approach vector and assigned landing now. CENTCOM out."

. . . . .

Earth, a few hours ago.

"I can't wait to visit another planet," Rina said, practically bouncing as she boarded the shuttle hovering above the roof of the Cube. Aron followed close behind her, wearing casual clothes. "I don't really get why you want to come. It isn't like there's anything to see there at the moment. A couple of domes, some cubes, and a whole lot of tunnels," he teased as he stepped into the spaceship behind her. A full team of Emperor's Aegis was waiting for him inside, and two more Aegis members—his and Rina's close guards—followed behind him.

"What's the point in having a security clearance now, if I don't actually use it?" she joked as she strapped herself into the acceleration harness on her seat.

Rina's security clearance had been upgraded since the wedding. Previously, she'd had a high clearance, but no need to know. But now that she was married to Aron and had taken her proper seat as the official Empress of the Terran Empire, her clearance was second only to his.

That said, it wouldn't have mattered before regardless. If she had really asked about something, Aron would never have hidden it from her. She simply hadn't had any reason to do so. Now, though, she not only had the reason to know, but also the duty to know. After all, if something were to ever happen to Aron, she would take over his reign as Empress Regent of the Terran Empire until the new heir (which was currently Henry) was able to take over.

"Let's go before Henry shows up," Aron said to the pilot as he strapped in as well. "He'll make a mess if we leave him behind and he actually sees us leaving."

The pilot lifted off without a word, even before Aron finished strapping himself in, and less than two minutes later, the small shuttle entered the kilometer-long vessel waiting in high geosynchronous orbit above Avalon Island.

Chapter 596 Good Taste

The moment the imperial ship received the emperor's shuttle, the captain brought up the shields and began heading to Mars.

Aron and Rina stepped out of the shuttle into the boat bay and met the side party that had been arranged to greet them. The ship's executive officer, Commander Shannon Robinson, came to attention and saluted. Aron returned the salute and asked, "Permission to come aboard?"

"Permission granted, Your Majesty, and welcome aboard Imperial One," Commander Robinson replied.

The bosun announced, "Terra arriving!" Then he pulled an old-fashioned bosun's pipe from his hip pocket and whistled the tune for arriving royalty.

"If you'll follow me, Your Majesty, I'll show you to your quarters. The captain is currently on the bridge, but he should be with you shortly," Commander Robinson said.

"The side party is a nice touch, Ms. Robinson." Aron smiled at the competent officer as she led him down an impeccably decorated passageway to the imperial quarters.

"Tradition is important, Your Majesty, and it seemed like a good one to maintain."

"Indeed, Ms. Robinson. Tradition is indeed important." Aron fell silent as they continued walking.

Rina looked around at the lush purple carpet, the tasteful wallpaper, the gilded Corinthian accents on the bulkheads, and the bas relief decorations on the overhead. She let out a low whistle and exclaimed, "You really went all out on the decorations, didn't you?"

"Blame Felix," Aron laughed. "You know what a history nut he is, and he spent hours browbeating me into it. 'You absolutely HAVE to have the appearance of power,' he told me, and I still don't necessarily agree with—" he gestured to the opulent surroundings, "—all of this. But I eventually caved."

"Yeah, that does sound like something he would do," Rina giggled. "So did he come up with the decorations himself?"

Aron shook his head. "No, although he really wanted to. But he couldn't carve out the time, and frankly, his tastes run to the gaudy, so I created the imperial design agency specifically for the purpose of interior and exterior design. You have no idea how flabbergasted and shellshocked all those fashion designers, interior decorators, and architects were when they got a call from Gaia inviting them to a new government agency," he laughed, remembering the surprise on the new recruits' faces.

"Still," he continued. "It really seems to have worked out for the best. At least our empire's decor is unified, and not a mishmash of hundreds of different styles based on ideas from hundreds of different designers. And, well, I obviously couldn't do it. I mean, you've seen what my personal taste runs to."

Rina laughed so hard she bent over and could hardly breathe. "Yes, yes I have," she wheezed in between fits of laughter. Aron's sense of style was truly... lacking would be putting it mildly.

Aron conceded the point and the group continued heading toward his quarters.

"I like their style," Rina finally announced as they reached their quarters. The decorations continued the elegant, understated luxury theme, but with hints of techist designs here and there. It was a blend of old and new, and having grown up in the Rothschild compound—which was basically "old money" personified—she felt very comfortable there.

She especially liked the king-sized bed and the sunken jacuzzi tub that looked like it could fit four people in it. But the color scheme, full of rich, royal purples and warm greens that contrasted nicely with the shining gold and silver accents, was also very much to her liking. And it contrasted nicely against the muted gray bedding, embroidered with the imperial coat of arms, and the marble tiles in the head.

"One good thing about your grandiose, overcompensating drive to build Really Big Things is that it gives you room to fit something like this into them instead of cramped quarters like you see on most normal-sized pleasure yachts." Rina grinned at her husband.

"Overcompensating?" He spread his arms wide and slowly stalked toward her as their close-in protection aegis guards nodded to each other and discreetly left the quarters. "Overcompensating for what!?" he jokingly screeched as he launched himself in his wife's direction.

Rina laughed and playfully dodged, throwing pillow after pillow at him as he chased her around the room, much like any normal pair of newlyweds would.

As it turned out, emperors were men just like anyone else.

.....

Time passed as Aron and Rina were cavorting in the imperial quarters aboard Imperial One. Imperial One, much like the ships escorting her, was capable of warp travel, but using an Alcubierre warp bubble inside an inhabited solar system would be a downright terrible idea. After all, whenever a warp bubble was disengaged, it would throw debris and deadly radiation in a cone centered on the direction of the vessel's travel, and that debris and radiation would make life miserable for anyone caught in that cone.

Thus, they were proceeding at a fairly sedate pace. In fact, even civilian traffic, should any have been allowed within the protective envelope of Imperial One's escorts, would easily be able to keep up with them even without engaging their gravity drives and relying on thrusters alone. And from the inside of the ships, nobody would be able to tell they were in motion unless they looked at the display showing Earth as an ever-shrinking circle.

Still, though their pace was sedate, they would still be arriving at Mars a little over five hours after they began the journey.

And despite the Sol system being the safest place the emperor could be (short of the Cube on Avalon Island, anyway), Imperial One was still filled with entire battalions of ARES troopers, two reaper teams, a full company of the emperor's aegis, and legion after legion of robotic auxiliaries in addition to the oversized naval crew. The crew was even held at general quarters whenever the emperor was aboard, and could move to battle stations in under a minute.

No matter the length of the trip the emperor was taking in the Terran Space Fleet's most advanced, well-protected ship, the security would remain on a hair trigger.

Chapter 597 A Blob in Space

Seven hours later.

"Now there's something you don't see every day," John mused. He was in CENTCOM, watching his emperor and empress float in the emptiness of space, a brilliant halo surrounding them on the viewscreen as the Henry's Eyes monitors included in the sensor rings detected all the mana flowing toward Aron.

It still lacked a little in terms of fidelity and resolution, so it showed up on the screen as an enormous blob. If the monitoring system had had that level of fidelity and resolution, however, it

would have shown something entirely different. Instead of a formless blob that shifted and flowed like an amoeba, reaching tentacles out here and there, it would have shown the intricately detailed runic construct growing out of Aron's figure like spider silk from a trapdoor spider's spinnerets.

But even without that level of detail, the staff of the CENTCOM monitoring center could still enjoy the view. And enjoy they did; especially as they knew that the emperor was putting the final touches on the defensive net that surrounded "their" planet in an impenetrable cocoon of protection. That final layer was what would guarantee their lives in the inevitable future invasions of the Sol system.

Yes, they all believed that invasions would be inevitable. Perhaps not in the short term, or in the near future, or even in the far future. But they couldn't count on every species that humanity was about to interact with being, if not friendly, at least not outright hostile. Especially not now that the species had left its cradle to investigate its surroundings for the very first time.

Rina, too, was enjoying the view of her husband at work. Except that, unlike CENTCOM, she not only had a front row seat, but she also had the ability to see the mana he was spinning out of him as each tiny rune linked with the next, and the next, and so on, until they grouped together to form pieces of a runic construct. Then, those larger pieces mirrored the actions of the parts they were comprised of and joined with other pieces of runic code almost like a puzzle being put together by an omniscient being. The process sent a shiver down her spine, as well as... other places.

"Yeah, it's been awhile, hasn't it," another of the founding members of ARES reminisced. "Five years or more, I think?" He looked around at the other founding members, all of them generals and admirals now, and they also fell silent as they remembered the hopeless situations that Aron had lifted them out of.

To them, news of the emperor being an awakener wasn't actually a surprise at all. They had all been healed by him in the beginning. Whether their physical forms, their emotional traumas, or even something as simple as age-related illnesses, they had all been healed by Aron's hand. Though they were still under a runic contract that prohibited them from discussing his abilities, they still wouldn't mention them; after all, Aron had awakened to mana years before the Three Percenters underwent their far more... traumatic awakenings.

Therefore, Aron's ability was something of a mystery to everyone else in the monitoring center, but not to those few individuals. Aron had never disappeared, to the best of anyone's knowledge, for long enough to undergo the awakening process. At least not when the rest of humanity was beginning its awakening, anyway. Just the opposite, in fact—he had been extremely visible, running to and fro to deal with the aftermath of the progenitor cult's "greeting" to the rest of the world.

Therefore, he had to either have awakened early, or later. Some people felt that he had awakened after the Three Percenters, but detractors of that school of thought pointed out that he was well outside the age range when the event began, much less to have awakened even later. But those who thought he had awakened earlier were stymied as well... after all, nobody had ever had even a hint of the existence of the "strange particle" before Aron had announced it to the world.

That said, the current conversation between the founding members seemed to imply that the emperor had indeed awakened long before any of the Three Percenters had.

And that terrified the others in the monitoring center. They were well aware of the risks a person would run when they knew too much. Thus, a sensor technician softly cleared his throat, reminding the founders that they had an audience and perhaps shouldn't be speaking on the subject so openly.

Not that any of those in the room would exactly go blabbing the secret to any who would listen. Even if they hadn't been loyal to the empire at large, and the emperor specifically, it was still a question as to who would believe them if they did talk. "Everybody" knew that the Three Percenters had all received their blessings within a specific period of time, after all, and furthermore, nobody had since. And if anyone had been blessed before the awakening event, surely they would have been noticed by at least one person!

But none of that was the case, so to the public at large, Aron was just a normal, albeit very intelligent, man who had just the right power in just the right place at just the right time to accomplish everything he'd achieved so far.

And since that most prolific expert—"Everyone"—knew that Aron was just a normal person, some among the blessed who deemed themselves superior to the unblessed masses also saw themselves as superior to the emperor himself. They were vocal advocates for the empire to be led by a blessed individual, all the while completely unaware that it actually was.

But since they only left their thoughts online, or during peaceful rallies on other issues, they were mostly left alone by the imperial government. Or so they thought, anyway; the akashic librarians assigned to each of them had already increased their monitoring level in case there were to come a day when the empire had to make a move on them.

### Chapter 598 Rina's Calling

If someone were close enough, they would be able to see a golden glow in Rina's eyes. At least if they were looking at her from the front, anyway; she still had yet to develop literal eyes in the back of her head. The golden glow was coming from magic circles surrounding her pupils that acted like mana lenses, and they were currently zooming in on the runic construct that Aron was carving.

Ever since receiving her blessing, she had been putting at least five hours, Earth time, into studying it and practicing its usage. And with the time dilation factor in Aron's private "sandbox" in the simulation, that equated to five HUNDRED hours each and every day. So, in effect, she had spent more than a decade within the simulation doing nothing but learning from Aron and various virtual instructors, having the theory of magic pounded—sometimes quite literally—into her.

She had long since begun putting the theory into practice, and following that, begun developing new theories of her own and even pushing the boundaries of the knowledge that Aron had purchased from his system. That had put her second only to him in her theoretical, and practical, knowledge when it came to mana and the usage thereof.

Still, though, she understood that it would be incredibly unlikely for her to surpass him, as evidenced by his quick, easy, and more importantly, easily understandable answers to the veritable barrage of questions she would fire at him with machine gun rapidity during every training session. It was something that did nothing but increase her admiration of him; she had always appreciated smart people, after all. And the fact that her husband was one of them was simply icing on the cake.

And Aron's advantage over her was being put on display on a grand scale now, as despite all the knowledge and experience she had gained through subjective decades of study, she was still finding

it insanely difficult to understand the process taking place in front of her. That said, however, runes weren't exactly in her wheelhouse. Sure, she had some basic knowledge of them, like their structure and such, but that basic understanding did nothing to explain the ease with which Aron carved the fractal pattern of the runic construct, nor the odd change in its color from gold, to blue, then finally to white.

As she was lost in thought, trying to explain the phenomenon, Aron finished imbuing his intent into the runic construct and opened his eyes. He nudged her shoulder, sending her into a slow spin in the zero-gravity environment, and asked, "What's on your mind?"

"I think I just found my calling," she said as she came back to herself.

"And what's that?" he asked. He knew she had been thinking of what she wanted to do with her life since the founding of the empire had upended her previous goal of being a business magnate and leader of her family. She didn't exactly NEED to do anything, not now that she was his empress, but she had never been one to laze around or rest on her laurels and he respected that about her.

"I want to push the boundaries as a magic researcher. I want to learn what causes the awakening phenomenon, and the mechanics of how mana operates. And maybe come up with a human-specific branch of magic, something different than what the nerd herd in the Lab City gold labs are working on.

"Right now, I'm thinking of focusing on trying to come up with a way of doing what you do, but without your runes. If I can do that, if I can integrate mana and technology, there's no end to the things we can do with it!" she breathlessly announced.

Although her idea may seem like an abrupt spur-of-the-moment decision spurred on by what she had seen moments ago, it was actually nothing of the sort. She had quickly fallen in love with magic in all of its multifarious forms, and since she'd already reached the peak of her life in terms of temporal power, she'd transferred her ambition and drive to the field of magic quite handily. The new, mystical system of magic had limitless possibilities, and combined with her personal drive to excel, the limitless possibilities excited her into sheer breathlessness.

Plus, she could learn it at her own pace, and wasn't being forced into it like her family had forced her into the business world with all of its arcane, draconian, and downright weird family rules. There was no tradition—yet—to bind her to a certain path, a certain way of thinking. Instead, she would be the one to blaze a trail for others to follow, and the thought of that triggered a nearly sexual satisfaction in her.

Perhaps her upbringing had affected her more than she would like to admit after all.

Still, her decision had long been made, and it was only now that she'd spoken it aloud to another human being for the first time. The experience of watching as Aron had carved a grand runic construct was nothing more than the last puzzle piece falling neatly into place and affirming the goal she had long unconsciously set for herself, solidifying her decision to delve deep into the fields of magic and awakenings.

"I look forward to what you come up with," Aron said with a smile on his face. Even—or perhaps, especially—with his system, he knew that new innovations and inventions were being discovered and built every day by countless beings across the infinite fabric of the universe, just like he had done when he'd invented the hybrid BQR-X computer system. There was no end to learning, to discovering, and innovating, and anyone who claimed otherwise was either severely mistaken, or trying to sell you something.

"We can talk more about it when we get back to Earth, but for now, let me just finish tethering this to the reactors. It'll take too long to expand it using just my own personal mana, since there's almost none of it around Mars to begin with. Especially not compared to Earth."

The two started moving toward the space elevator connecting the surface of Mars with its moon, Phobos, where the reactors that would power the Mars Planetary Defense Shield were housed.

Rina nodded like a chicken pecking at rice, throwing her into a bit of a flailing spin as she tried to reorient herself. She was new to zero gravity, so maintaining her orientation—especially while moving—was quite a difficult task for her.

Aron laughed so hard that he bent over and began his own slow spin, but he soon recovered and drifted there, waiting for his wife to recover as well. Which she eventually did, but not without a string of curses that would blacken the ears of any sailor in Earth's Age of Sail.

## Chapter 599 The First Diaspora

Once the shield was online, Aron and Rina took a shuttle back to the surface of Mars. Both of them were exhausted after such a marathon mana manipulation session and, after a brief rest, they planned to officially begin touring the facilities on, and in, the planet. There were already a few million soldiers stationed there on their three-month duty rotations, but those rotations would gradually lengthen until the Mars base was staffed with permanent residents. The only reason it hadn't already been a permanent duty station was because not all of the R&R facilities were complete yet.

And while there was perhaps nothing more dangerous than a bored soldier, stressed soldiers were at least a close second.

The tour would thus only briefly visit the areas of the base that would, once they were fully online, be designated as official rest and relaxation areas. Most of the week-long tour would be spent inspecting the vast automated factories that were nothing more than kilometers-long and kilometers-wide atomic printers capable of both conventional printing and runic engraving. Those were the most important, and most secret, areas in the Mars base and would drive the entire industrial chain that ARES and the TSF required to function as forces. There were others in the main asteroid belt between Mars and Jupiter, but the production base on the red planet had a capacity that put all others to shame.

Mars was also just the first stop on a months-long program of tours and inspections, coupled with the implementation of runic shielding on other defensive positions. Most of Jupiter and Saturns' moons were scheduled to receive shielding, as well as the planets Mercury and Venus, the moons of

the outer system gas giants—Neptune and Uranus—and all of the dwarf planets and other objects of sufficient size in the Kuiper belt.

All of those would eventually be part of the Sol system's defensive arrangements, though the outright construction was currently focusing on the Mars base, which would house the Sol system central command station. The rest would primarily be picket bases and fleet logistics depots, as well as home to eventual civilian industries such as refineries, smelters, and so on.

. . . . .

#### A few months later.

Despite the wishes of practically everyone, time continued its inexorable march from past to future, uncaring of what individual humans, or even humanity as a whole, were doing. And the time had finally come for the remnants of pre-imperial governments and their citizens to depart on their journey to frontiers unknown.

The empire, as it always did, had kept its word in both letter and spirit. Anyone who raised their head and looked up would be able to see the massive, city-sized ships waiting for their passengers and a stream of smaller craft flying back and forth from ship to cube, carrying load after load of stasis pods.

Over the previous months, which was more than a decade in subjective simulation time, the people who would be joining the exodus—willingly or not—had been training to deal with the realities of pioneering a colony on alien planets. But for the last month, the trainees had been released from their training to spend time with their families in a special area of the public VR that had been accelerated to a time dilation factor of 12:1. It had given them a full, and very generous, year in which they could set their affairs in order and bid their farewells.

That subjective year wasn't just to bid their friends and relatives a fond farewell, though. The empire had used the previous months of Earth time to liquidate any belongings that hadn't been earmarked as cubage to be brought with them—and there was a lot of those, despite the generous mass and space allowance the "colonists" would be allowed—at fair prices. Then they had deposited the END in an individual numbered account at the Bank of the Universe, or whatever remained of it after paying any existing debts or other financial obligations.

Thus, the year was also to give them time to decide what should be done with their money. After all, it was highly unlikely that any of it would be of particular use to them at their destinations, but should humanity survive the impending arrival of the visitors, they would eventually reach the colonies that would be founded in this first diaspora. However, though it might not be of use once they reached their destinations, it still had to be said that the colony ships would become the first cities upon arrival. Thus, the people aboard them could use that money to purchase upgrades for their eventual homes, along with any luxuries they thought they might need.

Should their purchases exceed the cubage allotment for each individual, the more affluent among them could also buy spare cubage from other passengers, who may not have the funds after their assets were liquidated. And the empire kept a wary eye on all of those transactions to ensure that the well-heeled couldn't take advantage of those who were less affluent than them.

Today was the day that the loading would finally be complete. Shuttle after shuttle had been in continuous operation over the last week, delivering loads of stasis pods to the cavernous holds

designed to maintain them in the colony ships. The "farewell simulation" was shut down and everyone within forcefully logged out of it the moment the clock struck the designated hour. And it wasn't only the farewell simulation that was deserted, either; the regular public VR was also a ghost town as everyone who could log out did so.

The first diaspora, as the talking heads and spox had finally settled on calling it, was due to depart in a few minutes, and everyone on Earth had, seemingly by unwritten and unspoken consensus, decided to see the colony ships off in person whether they personally knew anyone on them or not.

They all looked skyward as the shuttles made their final trips, the nonstop flood of craft slowing and thinning until it became a river, then a stream, then a creek... and finally, nothing remained in the sky save the massive colony ships.

The entire world fell silent and seemed to be holding its breath as those ships began ponderously floating upward in defiance of gravity, gaining speed as their altitude rose. They shrank, first to the size of cars, then to serving platters, frisbees, drink coasters... finally, they were nothing but dots against the backdrop of the blue sky.

Then, they disappeared from view.

Those watching the ships leave Earth had many thoughts among them. Some certainly thought it was the first black stain on the young Terran Empire's record, others thought about the necessity of unity among the species, and still others didn't care about unity or how history would see this day. They only mourned the leaving of their friends and family members, some, or most, of whom wouldn't have gone if they had been given the option to stay.

But regardless of what the observers were thinking, humanity's first diaspora had officially begun.

### Chapter 600 Arrival

As the colony ships carrying the first diaspora were beginning their journey, another journey was coming to an end. The TSF Proxima was coming out of its final stretch of warp travel just a few AU outside the heliopause of Proxima Centauri.

The inside of the Proxima was choreographed chaos as people who had chosen to spend the entire journey either in stasis or in their personal VR spaces woke and rushed to their assigned ships. The only people who had remained fully awake for the entire six-month-long journey were the crewmembers of the Proxima herself, and the crews, scientists, and marines were all traipsing along the corridors toward their assigned ships. Thankfully, the Proxima had been designed with just that situation in mind, so the million-odd people had no logjams or other holdups as they rushed to their proper places.

And every single one of them contributed to an atmosphere of vibrating anticipation; they were the first—the absolute first!—to reach their destination, which meant they would be the first to set foot on a completely alien planet. Theirs would be the pride of place in history that had previously only been claimed by a single man, Neil Armstrong, when he first-footed the Moon in 1969, or some time in 51 BE according to the imperial calendar. The quote "That's one small step for a man, one giant leap for mankind" had long entered the collective memory of all humanity and had never been topped since. Or before, for that matter.

Now, everyone on the Proxima was busily rehearsing what they would say, should they be so lucky as to be chosen by the ship's AI in the random draw that would determine just exactly who would be the first to set foot on Proxima Centauri b. At least in their minds, anyway; it wasn't as if they were rushing through the corridors of the cityship muttering to themselves like... like crazy people!

At least most of them, that is. There were more than a million people in motion, so of course there were a few that were muttering and giggling to themselves like loons.

That said, there were some that wouldn't have that opportunity. The crew complement of the escort fleet ships would remain aboard their ships for the duration, accompanied by the ships' complements of marines. The Terran Space Fleet ran crew numbers fairly close to the bone, as it were, so losing even one of them meant losing a potentially critical crewperson in case of emergency or enemy action. Even the marine contingents aboard, being mostly cargo while the ships were in transit, had duties and stations in the event of anything... untoward happening. They were the ones who were responsible for carrying out the critical task of damage control alongside the GEMbots and RES-QRs assigned to their vessels.

Another portion of the crew was also remaining calm. The scientists who had been assigned to the Proxima herself would remain aboard her until the exploration fleet finished building research stations in the system, at which point they would be assigned to those in penny packets, each specialty to their own station. They had even already begun their jobs, digging through the "old light" that the Proxima's visual sensors were busily collecting and piecing together.

Others among them were already tracking the reconnaissance drones the Proxima had launched once the bow shock of their disappearing warp bubble dissipated. Their task was to map the Proxima Centauri system and search for signs of advanced extraterrestrial life. Surely, if it existed, there would be signs of it. Obviously artificial satellites, space debris, and so on were all things that they were clustered at their workstations looking for, despite the distance from the system's "Goldilocks Zone".

{Time to initial map completion: 27 hours, 13 minutes,} Proxima, the cityship's main AI, announced.

"Fleet's being careful. Too careful, if you ask me—it's making me paranoid and giving me the shivers," one of the scientists said as the screen in front of him updated pixel by pixel as the heavily stealthed recon drones continued their journey through the system.

Although he understood the reasons for the caution with which they were approaching the initial mapping and data collection, and agreed with them, he couldn't help being impatient. His entire life, he had looked to the stars and dreamed that most wondrous of dreams, thinking to himself "What If". And now, one of those stars he used to observe through telescopes—first the one he had received as a birthday gift when he was only nine years old, and eventually, telescopes like the Hubble—was so near he could practically reach out his hand and grab it!

"Well, we already know Proxima Centauri b is within the zone, so it might be inhabited. And if—IF, I say—it is, well... we'll have some thinking to do about how we

approach the inhabitants. After all, in that case, we would be the invaders, and we don't know how they would react to us. We aren't here to cause trouble, just to check out the neighborhood... so to speak," the scientist at the screen to his left said, then turned her eyes back to her screen and studied it as it updated pixel by pixel, intent on finding anything she could to prove or disprove the existence of life in the system.

Twenty-seven hours later, they would know beyond a shadow of a doubt. But the earlier they could confirm or rule it out, the better their position would be.