

## Tech System 641

### Chapter 641 Proximan Hospitality

“We are... pleased to meet you, Commander—excuse me, Captain—Takahashi, plenipotentiary representative of the Terran Empire,” Birch said, extending her hand to shake Ayaka’s. She paid no attention to the marine guard contingent standing like statues, weapons in hand—albeit politely pointed toward the ground—and rendered anonymous by their unmarked SLEEK suits. “I am Birch, and through me you may speak to Oak, Crabapple, Mangrove, and Cypress as well.”

“Thank you for seeing us on such short notice, Lady Birch, and the others as well,” Ayaka said, taking Birch’s hand and politely shaking it. Her other hand signaled the rest of the diplomats, then she broke the environment seal on her SLEEK suit and removed her helmet, followed by the three remaining diplomats. “These are my colleagues: George Stefanopolous, an expert in contractual and treaty law—”

“Pleasure, Lady Birch,” George said with a slight bow of his head.

“Dr. Leigh Ayers-MacDougall, a xenobotanist expert and the scientific advisor of the delegation,” Ayaka continued.

“I’m thrilled to finally meet you, Lady Birch!” Leigh chirped in a friendly, excited tone. “May I ask—”

“There’ll be time for that later, Dr. Ayers-MacDougall,” Ayaka interjected. “And this is Boris Rustakovya, our xenodiplomacy advisor.”

Boris waved at Birch and said, “I’m excited to meet you, Lady Birch, and look forward to discovering more about you and this delightful planet of yours! And warm greetings to the others present as well—Lords and Ladies Oak, Crabapple, Mangrove, and Cypress.” He gave Birch a brilliant smile, turning his craggy face from broody to boyishly charming in an instant.

“And I believe you’ve met Warrant Officer Lee Joon-ho, our delegation’s awakener,” Ayaka finished.

Joon-ho smiled and waved at Birch. “You look magnificent, Birch. It’s nice to finally put a face to the, err... tree, I suppose. The meadow was a bit hard to get used to and I could never really tell if I was talking to myself, you see, because we—”

“Alright, Joon-ho, you can catch up with Lady Birch later,” Ayaka said, shooting him a Look with a capital L. “Right now, we need to attend to business.”

Birch returned his smile with her head once again tilted, this time toward her other shoulder. “Of course, Joon-ho, and thank you for your compliment.” She turned back to Ayaka and continued, “I know you must have many questions, since Joon-ho was too busy answering ours to ask any of his. Please allow me to bring us to a more comfortable setting.... I know Joon-ho complained about our hospitality many times during the time he spent with us in what he called the ‘timeless meadow’”

She waved her hand and meters-thick roots sprang up from the soil, racing into the sky and twining together, weaving themselves into thick walls and finally arranging themselves into what looked like a daimyo's castle straight out of the Japanese Sengoku period.

The marines, when they saw the roots break ground, began shouldering their pulse rifles, but Ayaka shook her head at Major Petrovich and gestured for the security to stand down. She perceived no threat from the roots, and her instincts had told her that Birch was being honest and forthcoming. Or perhaps it was Laifu, mostly dormant within her, giving her that sixth sense and empathic abilities.

"Thank you for the hospitality, Lady Birch," Ayaka said as she checked that all of her links with the Proxima were still connected and properly functioning. "Will this... castle... interfere with our communications with the ships in orbit?" It would be a shame if such a beautiful castle were to be on the receiving end of a planetkiller bombardment, after all.

"It will not, Captain Takahashi," Birch replied in no uncertain terms.

"Then we accept your hospitality," Ayaka said with a smile, as though there wasn't the threat of immediate planetary destruction hanging over the head of the treefolk and their soon-to-be-born "children".

"And you are absolutely correct, we do have many questions for you. Warrant Officer Lee's debriefing was... not as hopeful as we'd have liked, shall we say."

"What's a 'debriefing'?" Birch asked, her head practically turning a full hundred and eighty degrees upside down.

"A debriefing is when someone is brought before a panel of interested parties and questioned about a specific period of time or operation," Ayaka answered. "It's much like how the five of you interacted with Warrant Officer Lee in the timeless meadow."

Birch stilled, then lowered her head and cutely pressed her index fingertips together. "We owe you an apology for that, Captain Takahashi. It was never our intention to harm any of your individual beings.... We thought you were much like us, and only Joon-ho was a sapient being and the rest of you were as disposable to him as our leaves are to us. We had no concept of individuality before that, nor could we ever have imagined that beings different from us existed.

"Those reasons don't and aren't meant to excuse our reprehensible actions that cost you the lives of seven individual beings. If you would like to memorialize them, you can tell us about them at your convenience. We... remember. We may not have conceived of individual life like that before, but we never forget anything that passes," she said with obvious grief in her voice. It was apparent that the treefolk had never come into contact with death before.

Ayaka blinked away the moisture from her eyes before it could form tears and said, “Thank you for that, Lady Birch. Your offer is... most appreciated.”

Chaper 642 A Difficult Problem...

Ayaka took a moment to compose herself, then squared her shoulders and faced Birch. “But right now we have more pressing matters to consider. We’ll take you up on your gracious offer of a memorial in the future, but we need to know more about your children, and the children of your compatriots,” she said. “How mature, mentally and emotionally speaking, will they be when they’re... born?”

“That is an excellent question, Captain. We discussed it among ourselves and decided that it wouldn’t be cost-effective, in terms of mana expenditure, to raise them to the maturity level of Joon-ho when they’re first born. But that was only a contributing factor to the eventual decision.... What was more important was that we learned from him that individuals that aren’t part of a collective, as we are, are shaped and formed by their experiences.

“So if we were to artificially implant Joon-ho’s experiences into our children, they would be born with the same inspirations, hopes, and plans that he has within him based on his own life experience. And that, we thought, would be unbefitting of their unique individuality, an individuality that we hope to foster in them.”

Ayaka nodded in understanding. She wholeheartedly agreed, and the thought of billions of Terrible Teenagers running amok sent a chill shivering down her spine. One Joon-ho was more than enough, and perhaps half a Joon-ho too much.

“How do you plan on raising them, Lady Birch?” she asked.

Birch’s head rotated a hundred and eighty degrees and she gazed off into the distance as though she could see through the root construct that compromised the outer walls of the castle she had created out of what was essentially an extremely sturdy wicker. “We were actually hoping that you could help us with that, Captain,” she finally said after a moment.

The smile on Boris’ face faltered as he was reminded that Birch was still fundamentally alien; no human could possibly swivel, twist, and turn their heads as she did out of hand.

“We can teach you developmental psychology if you like, and childrearing practices... at least, we can teach you HUMAN childrearing practices. I’m not sure how well they would apply to nonhuman species, though,” Ayaka said, then turned to Boris. “What do you think?”

“Da. It’s likely that our childrearing practices and developmental psychology would only have limited applicability to the newborns,” he said, resting his elbow in his hand and rubbing his chin with his thumb. Ayaka concealed a wince; Boris had apparently forgotten that he was still wearing a SLEEK suit and that chin rub must have stung like a bitch.

But the gregarious Russian gave no sign as he continued, “We would need to study one in their development and generate a new field of developmental psychology....” He trailed off, mumbling incoherently to himself as he considered the creation of an entirely new field of psychology and the ramifications of it. As far as anyone knew, this was the first interaction humanity had ever had with an alien species, so his name would join the other greats of psychology in recorded history!

...If, that is, he was successful. Developing an entirely new school of thought to the point that it could be applied to billions of newborns—adult bodies or not—would be extremely difficult. And that difficulty would be raised to hell mode if he had to do it in the remaining time before the population was born. ‘Dammit!’ he thought. “Why couldn’t they have staggered the births, or reserved some of them? Or even just not birth so fucking many of them so they came out at least able to speak and use rudimentary tools!’

“Well, Boris?” Ayaka asked.

“Oh? Ah! Ahem... da. It’s possible, but so is Proxima Centauri going supernova tomorrow. There’s just not enough time to come up with a developmental plan for a species that doesn’t even exist yet,” he said.

“But it’s theoretically possible? What about time dilation?”

“We would need a control group and enough time dilation to watch them develop completely without interference to get a baseline, then repeat the process through a generational study with multiple test groups....” Boris devolved into highly technical psychological terms and Ayaka’s mind fuzzed out a bit.

“Give me a moment to discuss the situation with the fleet, please, Lady Birch. Right now it’s looking like we simply don’t have enough time for the first generation, but there may be another possibility,” she said, turning to Birch.

“Another possibility, Captain Takahashi?” Birch asked, spinning her head back around to face the erstwhile diplomat.

“Yes, it’s possible that, if you can delay their birth for say... a week, perhaps two, we can come up with a stopgap measure.”

“What is a week?” Birch tilted her head in confusion.

“A week is seven days... oh. Oh! Right, your concept of time differs from ours. A week would be....” She turned to Joon-ho with an expectant expression on her face.

“Almost a full turning around your sun, Birch,” he added. “Better to say three full turnings, tops. That would be four weeks, give or take, in Earth time.”

Ayaka nodded and her eyes glazed over as she “spoke” to the admiral on the Proxima. A few minutes later, she said, “Yes, three turnings would be barely enough time for what I have in mind. We can build a massive supercluster that allows extreme time dilation and build enough VR pods to

grant your children access to it, where they would be raised in a freeform environment that allows for maximum possibility in their development. Would that suffice, Lady Birch?"

"That would be splendid, Captain Takahashi," Birch said with a smile. Though, on her alien face that lacked lips, her smile looked more like a thin-lipped grimace. But that was just one of the quirks of xenodiplomacy; body language, in particular, would always remain different between different species.

"So what would you offer in exchange?" Ayaka asked.

"Well, I'm not sure we really have anything to offer," Birch said.

"What about joining the empire?" George interjected.

Birch turned to him, her face a mask. "Joining the empire? We will not promise anything on our children's behalf, nor will we attempt to guide, or force, them into a decision of their own."

"What about if the decision was left up to them?" he continued.

"That would be... acceptable, Mr. Stefanopolous. We understand that diplomacy requires negotiation, and negotiation is a matter of give and take. But there are some things we will never compromise on, and interfering in our children's lives is one of those things."

"Excellent!" he exclaimed. "Then let's begin the negotiations, shall we?" George, now in his negotiator mode, was far less dour and much more willing to speak in complete sentences.

Chapter 643 ...With a Provisional Solution

Hours passed as George and Birch negotiated, seated at a table she had grown for the specific purpose.

"What do you mean 'provisional' citizenship, Lady Birch?"

"We cannot promise full and lasting entry into the empire as an auxiliary society without first meeting the very emperor we would be swearing our allegiance to, can we, Mr. Stefanopolous?"

"Well, if you put it that way... no, that's an unreasonable request." George pondered for a moment, then continued, "Very well, I can accept that in our tentative agreement."

"How will you meet the emperor?" Ayaka asked. She agreed that the meeting would be of pivotal importance to both societies, but the logistics of facilitating such a meeting would be an absolute nightmare. Even at their ships' fastest speed, it would require the emperor of humanity to be absent from Earth for a full year. And that

didn't take into account the length of time he would need to spend on Proxima Centauri b.

"We have no idea," Birch answered. "But until we personally meet him, we won't allow our children to potentially die in your conflicts."

"And what criteria will you judge him on?"

"Whether or not he is worthy of our sacrifices."

Ayaka considered that for a while. But since the criteria was so broad, she could do nothing about it so she didn't waste much time thinking about it and switched topics. "Would you permit us to reestablish our research facility on the surface?" she asked. Last time hadn't gone exactly smoothly, between the mana-infused storm and the dangers posed by the trees' roots. So it would be a good idea, she thought, if she asked for permission up front rather than seeking forgiveness later.

As if she could read minds, Birch smiled and said, "Don't worry. Nothing will harm you if you choose to rebuild your base here. Last time it was a reflex, like swatting away a buzzing fly. This time, as long as you don't willingly harm the planet, you're welcome to our world."

Ayaka returned the smile. "Thank you, Lady Birch. And I have to ask—humankind has a virtual recreation of reality that we access through our conscious minds. Do you have a brain structure that would allow you to join us there?"

"That would take a larger device than I think you have," Birch laughed. "Our neural network is distributed throughout the entire planet, so unless you have a planet-sized... what did Joon-ho call it? A VR pod?" She fell silent in contemplation for a brief moment, then continued, "Anyway, unless you have hardware that would fit our bulk in, I'm afraid the answer is no."

Ayaka and Birch traded questions back and forth for more than three hours before the conversation came to a satisfying conclusion and the two agreed to meet again after the thorny problem of raising the first generation of Proximans was well on its way to completion.

"I'm always available and will be keeping close watch on my children from afar," Birch said as she stood and extended her hand to Ayaka for a handshake.

Ayaka shook her hand and watched as the elven woman with the bark skin and mossy hair turned back into a towering birch tree. She ran her fingers through her hair and sighed, "Time to get to work." There was much to be done and not a lot of time in which to do it.

She slowly spun around, taking a good look at her surroundings. 'Only Joon-ho,' she thought, shaking her head with a wry smile. 'Only the Terrible Teenager could come up with such a mish-mash of history and Earth mythology.... Giants, really?' She suppressed a giggle, then schooled her face back into its normal neutrally pleasant expression.

Although she was about to begin an enormous time- and resource-intense task, she felt nothing but excitement deep down. While, technically speaking, Joon-ho was the one who had established first contact with the Proximan treefolk, she would be the one credited with opening a diplomatic

communication channel. It was something that would have been almost impossible to even begin contemplating, had she remained in her previous position.

But thanks to the Terrible Teenager, her little brother in all but ancestry, she had ended up receiving that exact impossible opportunity. And she wasn't about to fuck it up.

Ordering Joon-ho to remain on the surface with a fire team of marines to act as "embassy guards", Ayaka took the rest of the diplomatic mission and marines back to the Proxima to wait for Research Base New New South Wales to be rebuilt.

As for Joon-ho, he was to remain dirtside to act as the liaison between the Proximan treefolk and the humans, who had already begun construction of an artificial moon that would house the quantum superclusters they would need to maintain high VR time dilation without virtually crippling their entire fleet every time the need arose. A second lander that had undergone refit to act as temporary housing for Joon-ho and his security team had already been dispatched from the Proxima, and the two landers passed each other as they headed for their destinations. One of them was crowded with GEMbots and constructor swarm queens, while the other was packed with diplomats and marines.

Aboard the outbound lander, which Ayaka had ordered to take a normal approach to the Proxima, the woman in question was busy finalizing a plan that would enable the Terran Empire to absorb ten billion aliens as provisional citizens. She had discovered a love for the job of xenodiplomacy and planned to exploit her current circumstances in order to provide the maximum benefits possible to the empire.

Not for a single second did she consider using the Proximans as the basis of a second star empire. She didn't even consider forging them into a country, or returning to Earth for a hostile takeover and supplantation of the current ruler. She knew deep down that the moment anyone attempted such a thing, they would be hammered by the fist of a god and cremated by a rage that burned hotter than the fiery cores of ten thousand suns.

Chapter 644 Ayaka's Elevator Pitch

TFS Proxima, the SCIF.

"That's everything we discussed, Sir," Ayaka said, ending her report to the fleet admiral.

He took a moment to consider the information; the meeting had gone in a direction he couldn't possibly have expected. Initially, he'd expected the worst, given the early hostilities between the trees and humans, and had thought there would be some misunderstandings or ideological differences between the species. But though there were indeed misunderstandings and ideological differences, the misunderstandings had been cleared up and the ideological differences resolved through the brilliant policy of "it doesn't matter".

Joon-ho's experiences with them had already indicated that the trees were a tolerant, forgiving, and compassionate species, but as a lifelong military man, Fleet Admiral Bianchi had a decided pessimistic bent to his thought process. And now that he had heard Ayaka's report, his skepticism was beginning to wane and he was feeling rather... optimistic, a state of mind he wasn't all that used to.

“What’s your take on their request, Captain?” he asked after a few minutes of thought. He had rearranged his decision-making process to fit the reality of the interspecies dialogue and was willing to entertain Ayaka’s input into his upcoming plans, should it make sense.

“There’s nothing to lose and everything to gain, Sir. No matter what the reasons are behind the trees’ request, everything will be beneficial to the empire whether they hold up their end of the bargain or not. If they do hold up their end, then great, everything’s worked out for the best. And if they don’t hold up their end of the bargain, they’ll find their children leaning rather far toward humanity instead of the trees.” Ayaka had already considered the matter from every angle she could think of, so she didn’t even have to consider her response for a moment; the question was one she had anticipated, anyway.

In her mind, it wouldn’t matter if the trees held up their end of the agreement. No matter what, they would have an overwhelming amount of data on the five species, as well as hundreds of millions, if not billions, of new citizens for the empire. The only thing that would change would be whether or not those new citizens were initially willing to join the empire on a permanent basis. If everything worked as planned, they would willingly join the empire. And if the trees proved untrustworthy, well... humanity would simply wipe Proxima Centauri b from the galaxy and brainwash the new species into compliance.

It wouldn’t be the first time humanity would be required to be trickier than others, nor would it be the last. It wouldn’t even be the first time the Terran Empire as a polity would be using their technology to brainwash people... or at least she thought that was the case, anyway. All throughout history, the militaries of various countries hadn’t even bothered trying to hide the fact that they brainwashed their members, and Ayaka had a sinking suspicion that the diaspora would include heavy levels of brainwashing the people aboard their cold-sleep generation ships as they sailed across the galaxy looking for new planets to plant their inhabitants on.

But something about brainwashing the newborn species still bothered her quite a bit, though she shoved that feeling into a box and would examine it later, when she had a moment. Her duty to the Terran Empire came first, then her duty to her family, then her duty to her species.... Her duty to herself was far down on her list of priorities, if in fact it was on that list at all in the first place.

“If it were up to you, how would you go about it?” the admiral asked.

“I have a basic idea, Sir.”

“What’s the elevator pitch?”

“We need to put all of them into VR before they even wake up, and increase the time dilation to as much as they can handle. While they’re in VR, we’ll teach them everything they need to function and let them live out a normal life without further interference.”



“And how would you suggest we go about that, Captain?”

“We bought ourselves another E-month, which should be just enough time to manufacture all the pods we’ll need for the ‘children’. Once we have them all in VR, we can build an artificial moon filled with enough quantum superclusters to increase time dilation in our VR simulation to the maximum amount they can handle. And by doing it in that order, we’ll be able to avoid waste by bringing the dilation up incrementally....”

Ayaka spoke for the next ten minutes, adding details to her plan as she went. Once she started taking longer breaks to think of things to add to it, the admiral interrupted her.

“Excellent, Captain. I think we can call it for today,” he said, deciding not to waste any more of either of their time.

Ayaka stood to attention and saluted the admiral, then exited the SCIF, leaving the admiral behind to continue his own work. A small smile played across her face as she headed to the boat bay, where she would board a gig and head out to the protostellar forge. They had a lot of work coming their way, and all of it would be backed by a deadline that was, by anyone’s standards, brutally short.

But she understood that some people lived for that kind of high-stakes, high-stress environment. And engineers, she had found—especially FLEET engineers—were all among that small group of people who enjoyed impossible challenges. Their motto, in fact, had been directly taken from the old United States Army Corps of Engineers: “The difficult, we do immediately; the impossible just takes a little bit longer”.

Well, Ayaka was about to drop a workload on them that would prove that motto. And the thought of the engineers’ reaction was giving her a lot of amusement already.

#### Chapter 645 Operation Raising Cain

A month after the initial diplomatic contact, the frantic period of activity in the protostellar forge finally came to an end. Ten billion VR pods had been rolled off the production lines in the space of four short weeks; the fleet engineers had truly lived up to their motto—the impossible had been accomplished, it had just taken a short time.

Birch and the other treefolk had been invaluable to the herculean task, delaying the birth of their children and ensuring their safe transfer to the pods may have been easy for them, but without their aid, the entire effort would have failed.

As the pods were filled with occupants, they were activated on stasis mode, waiting for the quantum superclusters to come online to generate a VR environment conducive to raising and educating them. And during the wait, the researchers of the task force were practically driven insane by the wealth of data generated by their scans. After the initial building and transplantation efforts, it fell to the scientists to determine what key points they would need to take into account once the system was in place and ready to be fully activated. After all, it was only to be expected that different species would have different requirements in terms of environment and so on.

But they could take their time. Each VR pod had been fitted with a fusion battery that would allow for up to fifty years of uninterrupted power before the pods themselves would need to be connected

to a power grid. At least in stasis mode, anyway; it would require more power to have the inhabitants' consciousnesses transported to virtual reality, tailored or otherwise. That said, however, time was their most valuable resource, so having such a surplus of it was quite a luxury, allowing them to focus their attention on developing the virtual environment rather than forcing them to rush the completion of an infrastructure that would allow them to accommodate the newborns.

And the entire process was handled with care and attention to detail. Every bit of their actions were recorded, verified, and dug through by others to catch anything the initial groups missed. Then, once the peer review was completed, the AIs of the task force took their turn and resolved whatever issues remained. The three-pass procedure ensured maximum results with minimal errors at the cost of redundancies in data collection artificially inflating the total amount collected.

Virtually every member of the fleet was spending every waking moment on the project. There was a truism in life that went something along the lines of "Good, fast, cheap. Choose two." The fleet had obviously chosen good and fast, with the cost measured in man-hours rather than Earth New Dollars. And that choice was working well for them, as measured in the constant discoveries being made practically every day, which provided motivation for the workers as they would receive a bonus in END once the project was completed, as well as bragging rights for being included in it to begin with.

Two weeks after the initial transfer had been completed, the initial simulated environment was available and debugged. In addition to that, enough quantum superclusters had come online to allow for a 2:1 time dilation rate, so at the two month mark, ten billion "infants" had been alive for a full month of subjective time, under the care and supervision of their "human" nannies and living in a virtual copy of the buildings and cities that were planned in the next stage of Operation Raising Cain.

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Protostellar forge.

The machinery of the forge had been operating at max capacity for two months, and would be operating at that rate for at least the next two E-years. Most of the capacity was dedicated to Operation Raising Cain, while the remainder had been devoted to constructing a second protostellar forge. If all went to plan, it would be just enough, running two protostellar forges at 80%, to ensure the successful completion of the operation and build cities on the planet to house the new graduates, who would then be expected to fend for themselves as any adult citizen of the Terran Empire would.

In addition to those two ongoing projects, small automated courier ships were being constructed in order to reestablish and maintain contact with Earth. They were tiny, hardy things, all armor and shielding strapped to the engines of a much larger class of ship. Each of them was little more than a sphere of about thirty meters in diameter, with just eight meters at the very center dedicated to housing a quantum supercluster, warp bubble generator, and fusion reactor. Theoretically, they would be able to maintain a speed of warp ten without the need to drop out of warp every few days to recalibrate their warp bubble generators. Needs must when the devil drives, and the task fleet's engineers had gone above and beyond to design and manufacture the tough little meteor-class messenger ships.

And today, their efforts finally bore fruit as the first meteor-class messenger rolled off the production line. The final checks were completed without issue and the vessel, designated TFM-

001, immediately engaged its gravity drive and headed above the system ecliptic at .75c, its maximum n-space speed. Normally, the fleet maintained all traffic along the ecliptic plane, but Fleet Admiral Bianchi had approved the messenger boats to operate above the ecliptic in order to avoid other traffic that was held to a much slower top in-system speed.

Once TFM-001 reached a clear plane, it reoriented itself and flew toward Proxima Centauri's heliopause in the direction of Earth, carrying dispatches from the fleet to headquarters and letters from the crew to their families and friends they had left behind.

About eight hours later, the first messenger boat—dubbed “little meteor”—transited the heliopause and engaged its warp generator, blinking out of n-space and rocketing back toward Earth at ten times the speed of light.

Contained within little meteor's databanks was a copy of every research project that had come to a conclusion, along with a detailed report of everything that had happened on the surface of Proxima Centauri b, with an emphasis on the discussion they'd had regarding the new Proximans joining the Terran Empire.

The second most highly flagged message was regarding the five researchers and two marines that had been crushed by roots. Everyone in the fleet had spent hours, days, or even weeks of the trip out to Proxima Centauri agonizing over what to send home in case they died. Fleet Admiral Bianchi's chief of staff, Lieutenant Commander Botha, had ordered every member of the fleet to record a message for posterity to be sent home in case the worst happened. And for those seven people, the worst had indeed happened.

#### Chapter 646 A Man's Romance

Lee Joon-ho and Ayaka were walking toward the New New New South Wales Research Base, a couple tons of raw materials hovering in the air behind them, courtesy of Joon-ho's affinity. “So what do you think the emperor will do? Will he actually come here?” Joon-ho asked.

“I'm not sure. I mean, I'm pretty sure he won't order us to forcefully subjugate the Proximans. I've never met him before, but if you look at the history of the empire's founding and the years leading up to it, he doesn't seem like the kind of leader to initiate wars of aggression. Even when the rest of the world formed a coalition against Eden, he only defended himself and it wasn't until they launched pretty much the entire world's nuclear arsenal at him that he retaliated. And after that, he even put the world leaders on trial instead of executing them. It wasn't even in a kangaroo court, either—the trials were fair, and some leaders were even left as heads of their countries.

“But will he come here? I don't know. It'd take an awfully long time... he'd be in transit for a full year, plus however long it took him to convince Lady Birch and the others once he arrived.”

“I guess that's fair,” Joon-ho mused. “But wouldn't it be awesome for him to actually show up? He's my hero, you know.”

Ayaka just smiled at the youngster and refrained from patting his head as they continued working on the infrastructure of the New New New South Wales Research Base.

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Task Force Proxima had hundreds of different teams and many more ad-hoc workgroups dealing with various issues ranging from the mundane to the critical. It was like a complex machine made up of many moving parts, each of which contributing something that made the whole far greater than the sum of its parts. But in practice, what that meant was....

Meetings. Hundreds, if not thousands of meetings. At any given moment, whether it be day, night, or some unholy combination of the two, someone, somewhere, was stuck in a meeting.

Currently, one of the more important of those meetings was taking place on the protostellar forge between the engineers responsible for designing and producing new hardware.

It wasn't an emergency meeting; far from it. It was just a routine monthly meeting where the attendees reported what they had accomplished over the month before and any minor problems they were currently facing that didn't merit an actual emergency meeting. It was also during routine meetings like this one that people would submit proposals, either for new products or suggestions on how to streamline the production process of a product they already had in their design catalogue.

And when the chairperson of today's meeting opened the floor to new business, a light lit up in front of one of the junior engineers in attendance, signaling that he had new business to introduce.

The meeting chair nodded at the junior engineer and said, "The floor is yours."

"Thank you." The engineer stood and waved his hand, generating a hologram of a giant over the conference table. "Based on our data, they should be approximately ten times as strong as humans, as a baseline. And it's fairly obvious that we don't have any vehicles that would accommodate their size, nor could we make them and have them remain even moderately combat effective.

"So my suggestion is that we implement power armor for the giants, and mecha of equivalent size for human-sized combatants. Giving the giants power armor would amplify their strength and provide power to ship-class weaponry. We could probably fit cruiser-class point-defense lasers on their shoulders, along with a corvette-class coilgun modified to be carried as a rifle." He paused for a moment, realizing that he was wandering slightly off topic.

"But we don't necessarily need to stop there," he continued. "We can design mecha for human-sized pilots, along with even bigger reactors powering stronger weaponry. I suggest, though, that due to the more complex nature of mecha compared to power armor, we should design the power armor to act more along the lines of close-ranged shock troops and use the mecha as long-ranged support and highly mobile artillery platforms. That way we maximize the benefits and minimize the drawbacks of each platform, all while keeping them to a size that should be effective in combat against any enemy they come across."

The engineer threw a data file to the others around the conference table and the room went silent as everyone read the file from start to finish. Although some of them were disappointed when they saw that the mecha and armor in question would only be ten to fifteen meters tall, and completely unlike their childhood “giant robots, fuck yeah!” dreams, they understood the realities of combat. Giant robots may be a man’s romance, and they may look good in movies and cartoons, but when it came to reality, simply trying to maneuver thirty-story-tall robots around a city without completely destroying it would be functionally impossible.

Thus, based on the information they had at hand, giants would be the perfect shock troopers. They wouldn’t require as much power from a reactor or fusion battery to move under the mass of their armor, which meant more of a limited power resource could be diverted to beefed up weaponry. Shoulder-mounted lasers, naval-class coilguns, and even close-quarters weaponry like plasma swords and vibroknives the size of a standard human sword were all on the table.

Mecha, on the other hand, were too inherently fragile to withstand the shock of melee combat. They were comprised of entirely too many moving parts, which meant they would be perfect as long-range fire platforms. And since humans were much smaller than giants, the engineers could fit entire fusion reactors into the mecha form factor, which would lead to Really Big Guns being a possibility. For example, some of the secondary weapons on a battleship, like plasma casters, grasers, and even entire missile control and coordination suites were a possibility!

Everyone at the conference table got lost in the possibilities presented by mecha as a combat platform and the silence stretched out until someone broke it with an inadvertent sneeze.

“Excellent suggestion,” the meeting chairman said, startled out of his daze by the sudden noise. “I think we’ll adjourn here for the day and when we meet again in a month, bring potential mecha and power armor designs with you for approval. But we’re done for today, ladies and gentlemen.”

## Chapter 647 Failure to Overcome

She leaned over the crib and teased the infant with a canary-yellow plush toy until it stopped wailing with a hiccup and focused on the toy, reaching out for it. The woman let the baby take the toy, then reached in and picked it out of the crib. Bringing it to her breast, she sniffed the air and said, “Whew... pee-yew, it’s time for a diaper change, isn’t it?”

The baby giggled and smiled at the woman, dropping the plush toy as it reached up to grab at her nose and pat her face.

She carried it over to the changing table and laid it down, then grabbed the baby’s feet and sang a short nursery rhyme about body parts as she raised the baby’s chubby legs in the air and began unfastening its diaper.

Similar situations were happening in nurseries all over the simulated virtual version of Proxima Centauri b, which was far more developed than the reality. In keeping with imperial design philosophy, vast cities of tall white spires rose from the ground, but as a nod to the local environment, the city was planned around equally tall black-barked and violet-leaved trees. Black,

violet, and white would normally be a very stark design choice, but somehow, under the red light of Proxima Centauri, it all blended into a cohesive, beautiful whole.

In order to save on processing power as fusion reactors and quantum superclusters were constructed deep within Proxima Centauri b, the only interior rooms in any of the cities were carbon copies of a single, gender-neutral nursery, staffed with a variety of species that corresponded with the infants housed within. But the cities spread across the continents were accurate to what would later be raised on the surface in later phases of construction in realspace.

Despite things going very well so far in the simulation, a problem was growing closer and more inevitable by the day. Once the “children” were raised to the point they were self sufficient and the infrastructure was present and waiting for occupancy, there would be an influx of ten billion young adults with no elders or children among them.

Thus, the decision to design and dispatch meteor-class messenger vessels to Earth, as Task Force Proxima had met a sociological issue that they simply weren’t prepared to handle. Xenobotany, xenopsychology, xenodiplomacy... there were a lot of “xeno” prefixed research fields represented among the scientists of the task force, but not a single person had anticipated needing to bootstrap an entire society comprised of five unique species! Not to mention Birch’s “request” to meet Aron, which also had to be communicated back home.

Still, despite the looming sociological issues, Operation Raising Cain continued as planned. And it would do so until if and when one of the newly developed messenger vessels returned with further instructions.

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While Task Force Proxima busied itself raising children that weren’t theirs, another fleet had finally arrived at their destination and immediately started working. The initial phases of mapping and exploration were precisely the same. Even the system was much the same, with a red dwarf primary star about 11% the size of Sol, but it had two planets within the habitable zone.

Teegarden b was almost the same size as Earth, but it orbited Teegarden’s Star at about 0.025 AU with an orbital period of less than five E-days.

By comparison, Teegarden c was only slightly smaller than Proxima Centauri b, at around 1.12 times the size of Earth with 1.11 times the mass and gravity. It orbited Teegarden’s Star at 0.044 AU and had an orbital period of 11.4 days, more than twice as long as Teegarden b and almost the same as Proxima Centauri b.

The two planets were a mere 2.84 kilometers away from each other, on average.

When Nova had selected the systems to explore, she had used two main criteria: the distance from Earth, and the likelihood of finding sapient life in the systems. Thus, all five destinations were known to have planets in the “Goldilocks Zone” of their stars, and were within reasonable distances from Earth, ranging from the six-month travel time for Task Force Proxima all the way to the four-year voyage of Task Force 1140, whose destination was the LHS 1140 system, a full 40 light years from humanity’s birthplace.

Teegarden’s Star was on the nearer end of that spectrum, with a travel time of around 14.5 months for Task Force Teegarden.

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“Oh my god,” the commanding officer of Task Force Teegarden said as the holotank on the bridge of the TFS Teegarden updated with the most recent mapping data.

A chill passed through the entire bridge crew’s collective spine as they saw the two planets of Teegarden’s Star. Both of them were in ruins, with evidence of enormous cities turned to rubble and gigantic craters scattered around the surface of the planets like sprinkles on donuts.

The level of ionizing radiation in the atmosphere of both planets was almost fifty times what would be survivable for humans, and nuclear winter had set in. It was obvious what had happened in the Teegarden’s Star system, evidenced by the wreckage of “primitive” (to the imperial eye, at least) ships stretching in a long, still-expanding line between Teegarden b and Teegarden c.

Researchers on Earth had once theorized that one of the reasons humanity had yet to meet aliens was that there were certain stages in a species’ development that could either bring advancements or catastrophes, and one of those stages was the nuclear power stage. It was clear that the situation in the Teegarden’s Star system was evidence of the species failing to overcome that hurdle, one that humanity had only luckily survived by dint of Aron’s overwhelming technological superiority making nuclear weapons obsolete.

Chapter 648 Mars Could Wait

“How long...” Fleet Admiral Jason Ryfczinski said. “How long ago did this happen?”

{Initial scans indicate a range of 30 to 75 years ago, Admiral. More detailed scans will narrow the field,} Teegarden, the task force’s AI, replied.

“So there’s a chance of survivors. Signal the fleet: launch a satellite constellation and put the explorer team on short call. Their orders are to find the survivors of this... this unholy massacre, should any exist. If there are no survivors, I want bodies,” the fleet admiral ordered.

“Yes, Sir,” the flag comms officer replied, then turned back to his display to distribute the orders to the fleet. “Satellites deployed, Admiral, they’ll be on station in approximately five hours.”

“Split the fleet, send half of it to Teegarden c. The other half, including the Teegarden herself, is to approach Teegarden b and enter a high equatorial orbit.”

“Aye aye, Admiral,” the flag tactical officer replied. “ETA to high equatorial orbit around Teegarden b is eleven hours.”

Thus began the exploration of the Teegarden’s Star system. The occasion was a solemn one, as the planets they were set to explore were in the grip of a nuclear winter, likely caused by an interplanetary war the likes of which no human could imagine.

Nobody knew what they would find, but they knew one thing for certain: whatever was dirtside would most definitely fuel their nightmares for years, if not decades to come.

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As always, the universe had no fucks to give about what humanity was currently up to and time continued its impassive march forward. For some, the ticking clocks were too fast, leaving them with too much to do and too little time in which to do it, while for others, the ticking of the clock was agonizingly slow, with seconds seemingly stretched out into endless hours.

Six months passed, just like that.

Mars, CENTCOM, System and Monitoring Control Center.

Over the past three months, CENTCOM SMCC had been tracking an object traveling at ten times the speed of light. It was on a direct course from Proxima Centauri and was traveling through a warp bubble that was likely generated by an Alcubierre drive, which made many believe that it was a dispatch vessel from Task Force Proxima. They should have been on station for long enough by now that a dispatch wouldn't be entirely unexpected.

But what had really sealed the deal was the rudimentary IFF (Identification Friend or Foe) system built into all imperial warp engines. One of the discoveries made in Lab City was that all Alcubierre warp bubbles vibrated along certain frequencies, depending on their size, shape, and a few other variables. And by designing the engine along those lines, they were able to kludge together a recognizable signal similar to a transponder, except it couldn't be turned off or modified without a major overhaul, and it only operated while the ship itself was inside a warp bubble.

And whatever was incoming was sending a crystal-clear imperial identification.

A tall, rugged-looking man entered the room in full ARES dress uniform, followed by a much smaller woman in office-lady attire, carrying a tablet and wearing a pair of AR glasses. "Any changes in the object?" the man asked as soon as he reached the railing separating the entryway from "the pit", where the analysts worked at their stations.

"None, Sir. If there are no changes, the incoming vessel will come in on course to arrive at the heliopause below the ecliptic. Our projections have it breaking warp directly in line with Sol. We've sent out picket corvettes and a few destroyers on intercept courses and expect they'll arrive on station to meet the vessel in exactly three hours and thirty-seven minutes," one of the analysts answered, pushing a button on his console that switched the main screen in the SMCC to display a detailed plot of the Sol system.

"Excellent. Keep me updated and let me know when they get into comms range," the man said, then turned and strode out of the SMCC without waiting for a response, his secretary fast-walking to keep up with his pace.

Although they had a protocol in place to handle incoming objects, this was the first time they were putting it into use outside of their training simulations. Thus, even though they were almost a hundred percent positive that the incoming object was friendly, they were still using it as a drill for the sailors of the Terran Fleet. And not a single person in the SMCC, or by extension, the rest of the fleet, wanted to fuck it up, by the numbers or otherwise.

"Yes, Sir..." The analyst attempted to respond to the man, but had ended up talking to nothing but the door.



Still, he returned to his work with a serious look on his face that showed exactly how seriously he was taking his assigned tasks.

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Precisely three hours and fifty minutes later.

The meteor-class messenger boat left warp speed directly below the ecliptic in a brilliant display of visible Cherenkov radiation reminiscent of a bird mantling and spreading its wings. The visible radiation was accompanied by a much deadlier invisible blast of ionizing radiation and supercharged particles that spread out in a cone in front of the small automated craft with enough force to strip the atmosphere off a planet, even with a strong magnetosphere around it.

A few seconds later, quantum communications were established with the waiting picket ships. They hadn't missed the mark by much, and in a feat of excellent stellar navigation, had come to full stop only five thousand kilometers away from the messenger.

The messenger herself, having performed outstandingly well on her maiden voyage, squawked her ident codes and signaled that she carried eyes-only dispatches for one Aron Michael, emperor of the Terran Empire from his subjects in the Proxima Centauri system and requested an escort to Earth to deliver those dispatches.

Mars could wait. There were more important deliveries to make first.

#### Chapter 649 Nobody Jumps the Lunar Queue

The messenger was swiftly ordered to proceed directly to Earth, escorted by the picket detachment nearest to her. After signaling an acknowledgement of the order, the small vessel's VI fell into formation between the two corvettes and behind the destroyer. Once everything was in place, they lit off their gravity drives and began maneuvering through the Oort cloud and the Sol system's heliopause beyond it.

As it passed through the system, the VI communicated with CENTCOM and received the updated map and access to the system plot, allowing it to see all of the public ships in the system. Almost all of the industry and shipping was distributed along the system ecliptic. Humanity still thought of things along 2d planes, it seemed. But it was unimaginably difficult to overcome hundreds of thousands, if not millions of years of evolution telling the species that ground was ground and sky was sky. Learning that "down" was more loose as a concept than they had imagined would naturally take some time.

The VI continued scanning the system plot and updating its navigational database.

The orbit of Neptune, the eighth and last planet in the Sol system, was mostly vacant. Only a few picket vessels were patrolling it, constantly on the lookout for anything coming into the system from beyond the Kuiper Belt. Pairs of fleet corvettes sailed hither and yon through the area, their sensors reaching out at full power.

It was mostly the same for Uranus, though there was a thriving industry in orbit around the planet itself. As an ice giant, Uranus was a hub of activity for so-called "slush miners", who would send ramscoops into the planet and haul back container after container of supercooled slush. They would

then bring those containers to processing facilities that had been built by civilians on Uranus' twenty-seven moons for further processing.

The empire was also in fair competition with the civilian cooperatives and maintained a processing station in high polar orbit, where those who were contracted to the empire instead of a civilian company would drop their loads and spend time in one of the many entertainment establishments there before heading out to pick up their next load. The imperial station was somehow more dignified than the lunar ports of call, with higher-class entertainments and a far calmer atmosphere overall, compared to the moon-based processing plants.

The same held true, for the most part, around the next two planets in-system from Uranus. Saturn was mostly occupied by a far rougher sort of asteroid jockey, mostly grim and stubborn men and women who made their living in the densely packed rings of Saturn. Jupiter, on the other hand, was primarily a rest, resupply, and logistics station where the miners of the Trojan Asteroid Belt congregated. They were more... corporate than the rough and tumble "rock jocks" of Saturn's rings.

There were a few things in common between the two gas giants, in terms of industry. Both planets were gas farms, with the same ubiquitous ramscoop tanker vessels operating around Jupiter and Saturn as there were around Uranus.

The biggest difference in the Sol system, though, was displayed on the next planet in-system from Jupiter. Mars had simply... ceased to exist on the plot. The planet was hidden from all forms of detection the empire could itself use; even visuals were blocked by the always-active Planetary Defense Shield around the red planet. In fact, if Aron weren't so paranoid about using the brainwashing tech at his disposal, only to have it somehow fail, he would likely go so far as to remove the very memory of the planet itself from humanity's collective memory.

He had even considered removing it from textbooks and movies everywhere, so the next generation wouldn't know that there was a hidden planet orbiting Sol. After all, another lesson the cult had taught the then-fledgling emperor was that not even humanity's minds were completely impenetrable forces. Even though he had the psionic shielding technology from the system, human beings were far from perfect and would lose them, break them, or even simply forget to charge them. Much like they did with cellphones, before cellphones became obsolete upon the introduction of AR glasses.

But since the star system's planetary information can be extrapolated from the rest of the planets in the solar system, he decided against it, making the thought come and disappear from his mind in only a few seconds following his thought process.

Mars, and the ARES facility that was almost completely operational upon and within it, was simply just that important.

Finally, the messenger reached Earth. The planet looked nothing like it had when the first diaspora had left, much less like it had when the exploration fleets had left before Aron got fed up and threw all the malcontents off the planet and sent them scattering off across the galaxy.

Orbiting outside Luna were hundreds of thousands of vessels, carrying the raw material from the giant processing stations and factories concentrated around planets and dotted here and there throughout the system. The ships there were in continuous movement, though, as planetary traffic

control slotted them into arrival gates within hours, if not minutes, after their arrival from the outer reaches.

The planetary shield was in its low-power mode and being used mostly for automated scans of the ships passing through either of its two main gates, ensuring that nothing was being brought in—accidentally or otherwise—that could harm the planet or the people that lived on it. On the messenger's visual scanners, it looked much like two lines of ants trooping along, one line going toward the space elevator carrying "food" and the other line leaving in search of that same "food".

Once the messenger and her escorts reached exolunar orbit, the escort ships broke off and returned to their picket stations, leaving the messenger boat behind. But it didn't stay in the entry queue for long, however, as Gaia opened a priority path for the meteor-class ship to jump the queue and directly enter Earth through a gap that was opened up in the shield for her use specifically.

Those ships the messenger passed were naturally curious. In all the time that humanity had been building its space infrastructure, one thing and one thing only had remained constant from beginning to end: nobody jumps the lunar queue. Nobody. But though they were unaware, that rule was constantly broken as stealth ships considered the lunar queue more of a suggestion than a rule. However, the meteor-class messenger ships had no stealth capabilities. And nor should they, as their role was to carry dispatches from place to place, so adding stealth functions would run counter to that role.

Still, it was the first time that any ship had ever flouted the rules so blatantly, and for a long time after the messenger had landed in her docking cradle on the surface, traffic control's communications lines were tied up by the complaints of those who had been passed in the queue.

Chapter 650 Our Transports Shall Block Out the Sun!

"Since the foundation of the empire, We have taken pride in our track record of promises made, promises kept. And today, We are here to deliver on one another of those promises: Our thousandth fortress city." Aron stood at a podium addressing the public in one of the new fortress city's government squares, a space about as big as an American football stadium. The entire area was filled to the brim with citizens who had nothing but smiles on their faces as they listened to his address.

The people watching Aron's address live would be among the first to finally receive keys to their new living spaces in the fortress city Aron was currently using as a venue for his speech. They had been anticipating the day they would finally become property owners in the empire ever since their interior designs had been approved.

Over the past six months, fortress city after fortress city had been coming online and filling with residents in an orderly fashion. There was something to be said for the organizational skills of AIs, after all.

The release of homes to those who had bought them, subsidized or not, had also been a great boost to the morale of the empire at large. Most of the new homeowners were of the millennial generation, and had been most afraid of never owning property of their own and always being subject to the whims of landlords. For them, it was a brilliant plan on the empire's part and they were practically shouting with glee after receiving their own little piece of permanence.

For landlords, though, it was a different story. Often acting as mosquitos that suck the lifeblood of the population, their lifestyles relied entirely on forcing people to pay ever-increasing rental fees simply to keep roofs over their heads. As a class of citizen, they quite suddenly—despite the years of advance notice—found themselves without a ready source of income they could fleece from sheep that had nowhere else to go.

Not that anyone would miss them, of course; there wasn't a single person on the planet that would choose to rent when the option to own was available to them.

Due to the large number of cities coming online across the globe, Aron couldn't deliver a speech at each of them. For multiple reasons, the most impactful of which was that it would be impossible to deliver a thousand different speeches in a thousand different locations without having them all become repetitions of the same script. And anyone who knew anything at all about public speaking knew that, without the impact of relevant information tailored specifically to the audience, no speech would have a positive effect.

So Aron could only deliver addresses at “milestone” cities. The first to open, the hundredth, and so on, which led to today's address being delivered at the thousandth fortress city.

Thus, while his schedule was fairly relaxed, it was a different story for everyone else. The logistics behind moving billions of people together with their possessions was tens of times more complex than the last empire-wide movement, when they had gathered all imperial citizens in cubes around the globe for their initial medical treatments. For the entire six months, the swarm of ships flying hither and yon in the atmosphere practically blocked out the sun entirely!

But with the efforts of Nova and Gaia working together, everything had been proceeding on track in an efficient manner without any of the clusterfucks that would have been involved had the moves been done by mere humans.

After all, with each fortress city being built to accommodate more than a million inhabitants, billions of people had to be moved from their current homes to their new ones. And with Aron's insistence that each city would be multicultural and blended, with inhabitants drawn randomly from across the globe (unless they specifically requested to be housed near their neighbors, relatives, and friends), the process of the move-ins themselves were as delicate as the finest clockmaker's creations.

“And with that, We hereby declare this fortress city officially open,” Aron concluded as he cut a golden ribbon with comically oversized scissors. The city's official mayor aided him by holding half of the scissors as they snipped through the ribbon. Some traditions were timeless, and ribbon-cutting ceremonies were one of them.

The people in the audience wildly cheered as Aron shook the mayor's hand and stepped down from the temporary stage that had been erected for his speech. He walked through the crowd, “shaking hands and kissing babies”, as the saying went, until he finally made it to the other end where he met with his two aegis shadows and began an unofficial tour of the rest of the city, leaving the mayor to handle the rest of the administrivia involved in opening the fortress cities.

Having walked for miles, he ended up in one of the many large playgrounds scattered throughout the city. He sat down to rest on one of the benches and a group of children ran up to him, showing no fear of the most powerful human in the species and chattering at him like a flock of magpies.

They had seen him on TV and heard enough about him from their parents to know that he was powerful, but children have a strange idea of power and often mix it up with physical strength, something that Aron didn't appear to possess much of.

The media and most of his emperor's aegis escort were quite a distance from him, at his personal request. The reporters were focused on his interaction with the children, while his aegis escort was busy maintaining a security perimeter around the edges of the park space.

Aron squatted down so that he was at eye level with the "leader" of the children and began, "So, what's your drea—"

But before he could finish his question, his expression grew serious and he rose to his feet. The two emperor's aegis near him, alerted by his behavior, were only half a heartbeat slower than him in turning on their "combat mode", so to speak. Aegis teams, and especially the emperor's aegis, were never entirely lax, but the current threat level had been deemed as minimal, so they were as relaxed as they ever were.

"Protect the kids," Aron ordered his two close guards, then stepped away from the gaggle of children.