## Mech 2571

Chapter 2571: Friendly Advice

Shortly after the treaty signing, the attendees began to exit the Hex Garden.

Some Larkinsons and Crossers lingered for a while in order to chat with each other. Before they formed the Golden Skull Alliance, the two sides only interacted sporadically.

Without the treaty, the two clans didn't have much in common. There was no natural friendship in between them and no reason for them to hang out.

All of that changed today. The pioneering alliance they established today meant that the Larkinsons and Crossers turned into comrades!

Since there was a significant chance that they might fight alongside each other in the future, the soldiers and mech pilots of both clans thought it was prudent to establish some closer relationships.

Patriarch Reginald Cross spoke with Ves for ten minutes before he moved to leave. His stiff expert pilots departed with their leader as well.

As the Larkinsons began to leave as well, Professor Benedict briefly held Ves back.

"We're in this together now." He spoke in a low tone.

Ves knew he had to be careful of what he said in this venue. "Are you happy now, professor?"

"Very." The former fugitive grinned. "Just call me Professor or Benedict. We are friends now. You don't have to pay too much attention to our differences in rank. As future collaborators, it is vital for us to develop an understanding of each other."

Understanding. How funny. Ves had no interest at all in understanding the man who used to be known as the Skull Architect. Even if Benedict hung up his pirate coat, he was anything but a typical Senior!

Ves awkwardly coughed. "You are of a different generation than mine. I don't think it is easy to become friends. I think it's best to stick to a professional relationship."

"Don't be so stiff, Ves." Benedict moved closer and slapped his palm against the younger mech designer's back. "The best collaborations arise out of mutual understanding. The ongoing collaboration between you and your wife is a great example. If the two of you weren't so close to each other, your results would have probably lacked that special quality that is only present in works designed with love."

"What nonsense are you talking about?" Ves growled.

"Hahaha. It is nice to be young." Benedict smiled in a patronizing manner. "You are lucky, you know that? You are so young for a Journeyman. Do you know why that is so highly prized in the mech industry."

"Our potential is greater. The earlier we exit the Apprentice stage, the more time we have to impact the higher ranks."

"That's not quite it." The Senior shook his head. "While you are correct, it is not the primary reason why the mech industry pays so much attention to mech designers such as you. While there is some disagreement over this, I believe the actual reason why talented fellows such as you are valuable is because of the passion derived from your youth."

Ves grew confused. "What do you mean?"

"You young folk are still young and tender. You haven't been grinded down by reality and the unfairness of the society you live in yet. This especially applies to upstarts like you who have managed to climb up from mediocrity in just a couple of steps. You're a confident mech designer, aren't you?"

"I am." Ves plainly admitted. "If you were in my shoes, you would feel the same way."

"You have ample grounds to be so self-assured, but try and make the most of it while you still can. It is easier for younger mech designers like you to aim high. Don't take your passion and enthusiasm for granted. Once you grow older and encounter more setbacks, it will become more challenging for you to maintain an optimistic mindset. By that time, it becomes ten times harder for you to design boldly and with as much energy as before."

Ves paused and took in the older man's words. He could feel that the advice was sincere. The Skull Architect seemed to portend an inevitable transformation.

To be honest, Ves was quite spooked by the prospect. However, he had met several different older mech designers. The best of them were still as vigorous as younger mech designers. It was hard to imagine that they were plodding old coots whose hearts had already atrophied.

"You don't seem to fall in this category." He remarked in a suspicious tone. "In our previous talks, you have always sounded optimistic about your future prospects."

"As mech designers grow older, they grow more comfortable with their success. Their body grows less active. This change in physiology also affects their thought patterns. It becomes more challenging for them to push themselves and make the difficult decisions that are necessary to progress their design philosophy. For example, if you were two-

hundred years older, you would never do something as reckless as entering the Nyxian Gap."

Ves unconsciously nodded. At that age, he would probably want to sit back, especially if he had already attained an extremely high level of success. Why should he risk his life this way when he was already a Master Mech Designer or a Star Designer? There were plenty of other pursuits that were worth his time!

"I know what you're thinking." Benedict said with a knowing expression. "You have to know that attitudes like yours are one of the main reasons that older mech designers slow down. Just think about it. In the first half of their careers, the most successful ones are very hard-working, daring and not afraid to explore the unknown. Now, suppose they grow older and no longer make the same decisions. Do you think they will still be able to progress just as much when they no longer follow their own formula for success?"

Though the professor's logic was hard to argue, Ves instinctively felt there was something wrong.

"I don't think it's that simple. The challenges that Apprentices and Journeymen have to overcome are very different from the difficulties that Seniors and Masters have to resolve. Even I know that as your design philosophy gets further ahead, you need to be a lot more thoughtful and do a lot more work. Diligence and persistence are far more important at those later stages."

Benedict briefly looked impressed. "You aren't wrong. Older mech designers can't afford to relax. The moment you spend less time on designing mechs and more time on enjoying the fruits of your work is the moment you have thrown away your chances of climbing higher. It is just that it's not enough for you to work diligently."

"I get that, but aren't you exaggerating a bit, professor?"

"NO." Benedict leaned forward and uttered in front of Ves! "You are very much mistaken about the barriers you must overcome. Imagine you are facing a completely sheer wall that is as tall as a mech. In order to get ahead, you need to overcome it in some way, and you can't use tools. How can you possibly accomplish this important feat?"

"Uhmm.."

"You can't, at least in a normal fashion!" Benedict shouted! "You need to be creative and make decisions that you wouldn't make at normal times! You need to expand your imagination and grasp solutions that aren't immediately apparent! For example, instead of trying to climb this wall, dig a tunnel even if your nails are bleeding! If the wall doesn't have any handholds, chisel them yourself! If there aren't any steps, just kill a lot of people and pile up their rotting bodies to form your own stairs!"

Ves backed off as Benedict ranted, but the professor persistently matched his pace!

"Uhm, professor, let's not be too morbid, shall we? We are mech designers. We are civilized people."

The Senior snapped back to reality. He blinked and adjusted his coat. "Ah. Ahem. I apologise for that, Ves. I was a bit too invested in the experiences of my own past. You are filled with talent. I hate to see you waste your gift by losing the qualities that have made you great. Inappropriate metaphors aside, remember my lesson. Every single Master and Star Designer has overcome impossible odds in order to achieve their level of success. When you approach my level, you must not flinch from the challenges that bar your way to Master."

With those words, the professor casually patted Ves' shoulder before flying towards the exit.

Ves kept hovering above the central garden for a few minutes. He eventually shrugged.

"Whatever. I'll see what I'm up against when I've reached Senior."

He was not ignorant to the fact that Seniors had to go above and beyond in order to realize their design philosophies. Plenty of mech designers had alluded the difficulty of overcoming this hurdle.

The problem was those same mech designers were too damn vague and indirect about what exactly they had to do in order to succeed! With no one telling Ves what they had to do, how could he ever take their warnings as seriously as they wished?

It was like describing the danger of the Nyxian Gap. While Ves received a flood of intelligence about the many threats lurking in the anomalous region of space, he merrily dove in with his task force and learned the hard way that it was a lot more terrifying than he thought!

"The problem is that there is only so much I can do to prepare for the challenges ahead."

It would have been great if Benedict offered him some concrete advice. Instead, all the Skull Architect told him was to maintain the courage and daring of his youth.

"Maybe he's right. Maybe I truly need to seek challenges in order to continue my progress." He muttered.

With the signing of the treaty, the two clans soon submitted their pioneering alliance application to the MTA.

The efficient organization only took a couple of hours to accept the application and include it in their registry.

The Golden Skull Alliance became an officially-recognized entity. So far, the alliance only consisted of the Larkinson and Cross Clans.

That would definitely change in the future. The Golden Skull Alliance needed at least one more partner in order to gather enough merits to redeem a fleet beyond ticket.

Applications already flooded the Larkinson Clan. There were many organizations interested in joining the alliance that Ves established with the Crossers.

However, none of them were worth his notice. If Gavin hadn't brought up any of them to Ves, then the offers simply didn't satisfy the conditions set by Larkinsons.

"I hope I can find some useful and qualified partners in the next couple of years."

The Larkinsons had plenty of time and opportunity to seek them. The Golden Skull Alliance had to pass through at least three star clusters in order to reach a beyonder gate. There were so many star sectors and states in between that there had to be some suitable groups along the way!

In fact, even Hexer dynasties had tried to worm their way into his alliance!

Their applications never reached his desk. Gavin knew better than that.

As the days went by, the two clans did not immediately turn into bosom buddies. The Larkinsons and Crossers still needed a lot of time in order to develop closer friendships.

This was fine to Ves. As far as he was concerned, this was just an alliance of convenience.

Both clans began to prepare for their upcoming journey. Ves, Gloriana, Juliet and the rest of the Design Department spent most of their time on progressing their design projects. Other Larkinsons were busy trying to gather the supplies and ready their fleet for departure.

With the date of delivery of a pair of very special capital ships coming closer, anticipation continued to build up among the Larkinsons.

After many months of residing in this boring star system, the Larkinsons were eager to leave and explore the wider galaxy!

As the wait grew unbearable, a large fleet finally entered the Cinach System!

## Chapter 2572: Grand Entry

Everytime a starship engaging in FTL travel transitioned back to the material dimensions, a considerable amount of fluctuations burst out from the point of emergence.

While these fluctuations are quite random and chaotic, humanity slowly learned how to decipher a number of clues. By interpreting certain patterns, it became possible to predict the size, mass, FTL drive strength, power output and many other parameters.

The CFA unquestionably developed these capabilities the most. Rumors circulated on the galactic net that the CFA was able to peer into the higher dimensions and make detailed observations of any ships travelling through them far in advance!

Ordinary states and organizations didn't have these capabilities. At the most, their best sensor systems were mostly able to give them a brief advance warning as well as providing estimates on the overall mass of the entering ships and possibly how many of them were emerging at the same.

Right now, a Glory Seeker combat carrier on patrol happened to be close enough to observe the FTL transitions with good clarity.

As Ves entered the bridge of the Scarlet Rose, he sensed a huge amount of anticipation from the Battle Crier crew.

Everyone guessed what the gravitic fluctuations portended!

Numerous states and many more star systems sat between the Sentinel Kingdom and the Hexadric Hegemony.

Unless a starship possessed a very advanced FTL drive, every vessel had to make at least one stop in between in order to cross the vast distance in between.

General traffic flowed along well-established trade routes. These routes criss-crossed each other many times, thereby creating a branching web that consisted of many powerful star systems.

In order to qualify as a node for FTL travel, a star system had to possess a massive star. The greater the mass, the easier it was to dial in an FTL drive towards the right destination. The chances of dangerous misses and going wildly off-course were minimized.

Any fleet that wanted to sneak to a destination unnoticed would avoid these star systems like the plague. They had to hop between much weaker but much more ubiquitous star systems. Hardly anyone cared about star systems centered around red

dwarfs and brown dwarfs. They were the equivalent of cramped and dirty alleys in space.

A majestic, Hexer-built fleet of brand-new starships would never crawl through these desolate alleyways!

From the moment the starships turned spaceworthy and assembled into a delivery fleet, their temporary Hexer crews navigated through the safest, fastest and most direct route from the assembly point in the Hegemony to the Cinach System in the Sentinel Kingdom!

Therefore, from the moment a pair of enormous capital ships emerged from the higher dimensions, no one expressed too much surprise. The clan already received ample warning. In fact, its analysts already estimated that the Hexer-led fleet would arrive at the Cinach System within two days!

As soon as the capital ships settled into the material realm, a swarm of smaller vessels emerged as well. Combat carriers, logistical ships, cargo ships and more continued to stabilize themselves before flanking the two capital ships like an honor guard!

"Meow!"

Lucky, who floated alongside Ves, looked stunned at the growing fleet emerging out of FTL.

Aside from one of the two capital ships, every vessel was coated in red!

Each ship that made up the fleet shared the same aesthetic look. Depending on their role and tonnage, they were shaped like fat and stubby rods. Their cross-sections were always shaped like hexagons, though their sides were very tall and their top and bottom 'roofs' were fairly squished in order to increase the effective usage of space.

For now, the ships looked fairly plain in appearance. Aside from their eye-catching red coating, their sides were left bare, though there were already plenty of interesting elements on their exterior. Hatches, sensor arrays, external storage compartments, bunkers, observation windows and so on all broke up the monotony of smooth hull plating.

Of course, that didn't mean the ships lacked armor. It was the opposite in fact! For capital ships, any breaches spelled serious danger to vessels that were worth at least a trillion hex credits!

Meters-thick armor plating protected them from micro-impacts and more devastating attacks alike. A very sophisticated arrangement of spacing, supporting structures, compartmentalization and modular components ensured the capital ships wouldn't succumb from a few incidental attacks.

One of the two ships boasted considerably better armor. The Indigo Tremor, the fleet carrier and capital ship of the Glory Seekers, allocated a much greater proportion of her budget towards the quality and quantity of her hull plating!

"She's a beast." Calabast uttered as she admired the fleet carrier depicted in the projection.

The spymaster slipped onto the bridge a few moments earlier.

Right now, she looked excited at all of the hardware moving to the inner system. The fleet that had just arrived consisted of all of the starships, supplies and other assets the Larkinson Clan had ordered from the Hegemony.

Once the Larkinsons formally accepted this enormous delivery, they obtained all of the elements to form an expeditionary fleet. They only needed to unpack their goods and gain some proficiency in controlling their new assets.

Within a month or two, the Golden Skull Alliance would finally be ready to set off its much-anticipated journey!

Let alone Calabast, even Ves couldn't rein in his enthusiasm!

"What do you think of the Indigo Tremor?" He asked.

"She's a modern Hexer fleet carrier." Calabast answered. "The Hegemony has built many fleet carriers, and the Indigo Tremor is not too inferior to those utilized by the Hex Army. While she is missing some classified tech and components, she is more than capable of serving as the focal point of a space battle."

With good defenses, a nominal capacity of 600 mechs and 78 bunkers, the Indigo Tremor had become the toughest and most reliable vessel in the Larkinson fleet!

Of course, the Tremor wasn't technically part of the Larkinson Clan. Her management fell under the Glory Seekers, who ultimately answered to the Wodin Dynasty.

While Ves still felt a little sour about giving up a precious ship slot to Madame Constance Wodin, at the very least the Wodins hadn't wasted the opportunity.

Perhaps the greatest benefit out of this concession was that the Wodins were also responsible for the upkeep of the Indigo Tremor. Her expensive hull plating might be able to resist a lot of damage, but if they ever broke, it cost a considerable amount of money to restore them. Ves would not feel any pain if the new flagship of the Glory Seekers took a hefty beating.

Fleet carriers that were designed to attract enemy fire had been known to bankrupt their owners!

Ves rubbed his smooth-shaven chin. "Compared to the Antonio Cross and the Hemmington Cross, the Indigo Tremor strikes a good balance between capacity, defense and mobility. The only downside is that she moves like a tub."

He didn't mention the Indigo Tremor's secret colony base function. It was none of his business if the Wodins wanted to plant their flag on a planet in the Red Ocean Dwarf Galaxy.

"The Indigo Tremor isn't the only tub." Calabast smirked and gestured her hand at the adjacent capital ship. "Your new toy is just as sluggish."

"She's my toy, though."

After Ves took in the Indigo Tremor, he finally directed his attention to the ship that had occupied his dreams for years.

The majestic red capital ship possessed a considerably different profile than the Glory Seeker fleet carrier. While she adopted roughly the same shape as the Indigo Tremor, her hull plating was not as thick or resilient.

That didn't mean her defenses were weak. The red capital ship possessed enough defenses to fend off smaller assaults on her own. Her serviceable hull plating, power-hungry shield generators and 80 reinforced bunkers were far from typical of a capital ship devoted to industrial production.

Though her acceleration and mobility characteristics were just as plodding as any capital ships, she was a bit better off than the Indigo Tremor in this regard.

In short, the unnamed capital ship was very well equipped to survive the frontier!

As Ves continually raked his eyes over her formidable shape, intense satisfaction suffused his body.

Power! This was power!

Not even hundreds of combat carriers could compare to the value of his factory ship. It cost 2 trillion hex credits to build the current incarnation of this capital ship.

The formidable active and passive defenses of the factory ship claimed much of her budget. Yet the most important aspect of his future flagship wasn't her combat capabilities, but instead her production capabilities!

Twenty modern high-end Hexer production lines could churn out advanced secondclass mechs at a high pace. As long as the Larkinson Clan was able to sustain her voracious production volume, then the industrial vessel essentially functioned as a large and mobile manufacturing complex. This was the key to maintaining the independence of his expeditionary fleet!

While a normal manufacturing complex built on land was only 5 to 15 percent as expensive as this extravagant capital ship, any fixed facilities weren't able to move with his fleet.

What was the point of investing in a fixed production facility if it only anchored his expeditionary fleet within a certain range?

Ves did not want to be bound by any location!

He wanted to explore new territories without any shackles limiting his travel options!

In order to secure these capabilities, he did not flinch from demanding a factory ship instead of a fleet carrier as the first capital ship of the Larkinson Clan.

As a mech designer, having his own roving production facility was a great luxury!

Certainly, a factory ship was not without its downsides. As mentioned earlier, it was very troublesome to manage the logistics of keeping it supplied.

With 20 production lines, the factory ship ate through a lot of materials at her peak. While the vessel possessed enormous cargo bays, they weren't sufficient in the long run. The Larkinson fleet had to incorporate a lot of cargo ships in order to store the raw materials and finished products. The LMC and the Larkinson Clan also had to establish versatile and redundant supply lines that were capable of delivering an abundant amount of raw materials to a fleet that regularly moved around.

If the expeditionary fleet traveled beyond the range of those supply lines, then it became increasingly harder to keep the production lines running!

This was an incredibly complicated matter. It was already hard enough to keep a moving factory ship supplied while travelling through the Milky Way. At least his fleet would be travelling through established space where an abundant amount of resource suppliers and distribution networks were able to deliver the necessary raw materials to his factory ship.

What about the Red Ocean?

Supplying the factory ship would doubtlessly be a lot more troublesome over there! Too little time had passed for the initial wave of pioneers to set up a comprehensive resource extraction industry, let alone establish large-scale trade networks.

"Well, it doesn't matter." He softly muttered.

Even if he couldn't fully utilize the factory ship all the time, it was fine if she was bleeding money. He valued the factory ship for her mobile mass production capabilities. When it came to earning money, the business empire he erected in the Komodo Star Sector and adjacent star sectors already had that covered!

With the arrival of the final batch of Hexer-built vessels, every Larkinson gained a lot of hope for the future. Even though they were frequently told that the Larkinsons would be getting their own capital ship, it was only now that the truth sank in. With such an impressive factory ship, the Larkinson Clan could finally lift its head high in front of the Cross Clan!

"Get ready, Ves." Calabast softly spoke to her. "It's one thing to receive a capital ship. It's another thing to master her. Your precious factory ship won't be fully in your control unless she is crewed entirely by your own people!"

Chapter 2573: Crewing a Capital Ship

The arriving fleet took its time to reach Cinach VI. The temporary crew of the recently-built factory ship had to perform a lot of inspections in order to check for any problems arising from her maiden voyage.

Properly speaking, every newly-built starship had to go through at least one comprehensive shakedown cruise.

The bigger the vessel, the greater amount of parts. The greater amount of parts, the greater the probability that something might go wrong!

These days, the space trials of sub-capital ships didn't need to be comprehensive. Advanced scanners and technology-assisted inspections already helped with making sure that none of their parts were abnormal.

Capital ships were different!

Their total volume exceeded that of typical cities. They had so many decks filled with huge, interconnected ship components that no amount of inspection could ensure that they would all run smoothly!

This was why most capital ships required at least half a year of shakedown cruises in order to detect problematic elements and make sure that every system worked as intended.

It wasn't unusual for fires to break out, capacitors to explode, components to overload or the supply of oxygen to be cut off in the middle of the night!

What the Larkinson Clan was actually receiving was not a fully-mature factory ship. Instead, she was the equivalent of a prototype. While most of her systems worked as

expected, there may be a handful of unexpected flaws and quirks impacting her performance.

That did not diminish Ves' enthusiasm.

Due to his impatience, he demanded the Hexers to skip the lengthy space trials and just deliver his factory ship to him as soon as possible.

The Hexers may be arrogant and prejudiced against boys, but they were not incompetent. The Hexadric Hegemony was a true second-rate state with tech and production standards that were far beyond what any third-rate state could accomplish.

In the past several months, the Larkinson Clan received regular batches of Hexer-built combat carriers and other vessels. Despite their second-hand nature, Ves hardly found any fault in their design, construction and refurbishment.

The Hexers hardly cut any corners!

Due to their superiority complex, the female supremacists constantly expected the best from themselves. They at least had to be better than the Fridaymen!

As the beneficiary of Hexer excellence, Ves possessed a lot of faith in the quality of his factory ship. At the very least, she hadn't broken down in her maiden voyage. While that didn't rule out the possibility that something might go wrong in the future, the crew of the factory ship would have plenty of time to work out her kinks in the next couple of years.

From the moment the last batch of ordered starships entered the Cinach System, the Larkinsons quickly prepared to receive them. A lot of new Larkinson naval officers and ratings eagerly packed their bags. They also readied all of the mechs, equipment, supplies and other goods they planned to load into their incoming vessels.

Dozens of cargo ships were already waiting to transfer their goods into the factory ship!

Much of their cargo consisted of the expensive raw materials needed to produce a lot of Transcendent Punishers. The LMC already procured them some time ago but lacked the high-end production facilities necessary to produce the Larkinson Clan's exclusive artillery mechs.

Soon, the wait would be over.

Once the factory ship churned out a couple of dozen Transcendent Punishers, the Larkinson fleet would gain a lot more confidence!

At the very least, if a pirate warship like the Gravada Knarlax confronted the new fleet, then the enemy vessel would quickly succumb from the sustained bombardment of a score of Transcendent Punishers!

In short, the factory ship opened a brand-new future for the Larkinson Clan! No longer would Ves have to beg the Hexers or some other second-raters to fabricate advanced mechs and other high-tech goods.

His clan was almost fully capable of meeting its own production needs!

It didn't matter if the efficiency was lower and the cost was higher than relying on fixed production facilities. Even if it cost twice as much money to fabricate a mech in his new factory ship, Ves would still kiss his new flagship silly.

In fact, if he wasn't already married to Gloriana, he would have tried to see if it was viable to marry a capital ship!

Naturally, with such an important asset about to fall into his hands, Ves became incredibly busy. He personally supervised much of the preparation work.

He cracked open the containers in order to see if the goods inside were up to standard.

He met with some of the senior and junior officers who were ready to assume their new positions on the new vessel.

He also inspected the chief technicians who would soon be assuming control over the sophisticated production lines.

When Ves engaged in the latter two activities, he became a bit disappointed in the quality of his personnel. While they were very skilled and knowledgeable in their line of work, they were not yet up to the task of controlling all of the systems of a second-class capital ship.

"We tried our best, sir." Fleet Coordinator Ophelia Kronon looked apologetic as she reported to Ves at this busy period of time. "While we have few issues with hiring some of the most qualified spacers of the Sentinel Kingdom and other third-rate states, it is still too challenging to hire qualified second-class professionals."

"You had months."

Ophelia shook her head. "It's not enough. One of the greatest hindrances to hiring qualified crew is our inconvenient location. Since you prohibited us from hiring Fridaymen and Hexers, there are not many options left in our star sector."

"Tell me how you intend to solve this staffing issue."

"The problem isn't acute. Your factory ship comes with a very capable crew of Hexer trainers. They are enough to keep the essential systems of the vessel running. While our current spacers are learning from the Hegemony-supplied trainers, we can gradually

supplement our crew with highly-skilled officers and specialists as we navigate towards one of the regional beyonder gates."

"I see. We don't have much choice but to follow this course of action, I guess." Ves looked resigned. "How much crew does it take to operate the factory ship?"

"That's not a simple question to answer."

"Give me an idea, then."

"Well, according to the ship schematics and other data that I have studied, your factory ship requires at least a minimum of 1000 spacers to perform her most basic functions. This entails engaging her sub-light propulsion systems, providing enough oxygen to keep the air breathable and making short FTL hops. However, don't think that this is viable in the long run. A crew of just 1000 is not enough to keep the factory ship in good condition. Her systems and components will deteriorate at an accelerated pace with a skeleton crew."

"How many trainers are there on the factory ship?"

"The Hegemony has informed us that it has assigned around 500 trainers to your factory ship. Right now, there are at least 1500 more Hexer crew members on the vessel, but they will be departing shortly after our clan takes possession of the factory ship. A crew complement of 2000 is the most basic threshold to ensure her operation over longer periods of time. Mind you, this does not include the production crews that are responsible for manning the production lines."

"How many people does it take to run our factory ship at full capacity?"

Ophelia briefly paused. "5000 is a decent number, sir. In fact, she can accommodate double or triple that amount without overburdening the vessel. You can fit a lot of people in a capital ship. With more crew, it becomes possible to establish rotating shifts of personnel. This ensures that she remains at full capacity at every hour of the day while having an abundant amount of manpower at your disposal during active engagements."

Capital ships were like several cities stacked on top of each other. Let alone 15,000 people, as long as his clan freed up enough space and beefed up her life-support systems, his factory ship could potentially accommodate 150,000 extra passengers!

Naturally, there was no way Ves would do something so pointless. His factory ship was not a luxury liner!

The importance of crewing the ship started right at the top. The captain of the factory ship was the most essential role to fulfill. Since starship crews were organized in rigid hierarchies, the person at the top of the pyramid possessed an unsurpassed amount of power.

Without a huge degree of competence, experience, talent and technical expertise, it was impossible to command a vast capital ship!

"Do we have a captain for our factory ship?" Ves asked.

"Not quite, sir." Ophelia carefully answered. "The amount of naval officers who are qualified to captain capital ships are very scarce. Most of them are brought up within the militaries and institutions of a state. Even in the private sector, large trading and passenger transport companies are accustomed to invest many decades in bringing up their own capital ship crews."

In other words, the Larkinson Clan didn't have a captain ready.

Suffice to say, Ves wasn't happy with that news.

As the arriving fleet finally entered into high orbit over Cinach VI, several hours went by as a lot of transports and vessels began to unload their goods and crews onto the arriving vessels.

Ves and Gloriana both had to take care of the handover procedures and other administrative necessities.

By the time they took their cats and entered a shuttle that would take them to their new flagship, Ves had almost gone crazy due to all of the delays.

"Finally!" He shouted as he settled into his seat.

Gloriana placed her palm onto his hand. "I know you're excited, but our flagship isn't going anywhere. She's ours now, right?"

"Almost." Ves nodded. "Our personnel still needs to inspect the whole interior and exterior of our factory ship in order to make sure the Hexers haven't missed anything. As long as that is in order, we can finalize the handover process."

"Don't worry. Hexers are always thorough. Not a single tool will be missing from our new home."

Home. Gloriana did not use that word casually. Before, she considered the Scimitar System in the Hexadric Hegemony to be her home. The Stellar Chaser that she took up residence in over the last few years was just a temporary hotel in her eyes.

This was different. The brand-new factory ship was not just a workplace. She possessed plenty of living space and other amenities.

Though she was not an ark ship, she still offered enough space for shops, restaurants, parks and even a school!

With room for thousands of crew members, the factory ship was more than capable of simulating city life. Aside from the lack of open space and other constraints, it shouldn't be a major problem for the Miracle Couple and the rest of the expansive crew to distract themselves on the floating city.

After a slow and steady approach, the shuttle slowly entered the primary hangar bay of the factory ship.

There were actually two hangar bays. The primary hangar bay could accommodate 12 mechs and 6 shuttles at a time. This was actually pretty tiny for a capital ship, but Ves had opted to shrink this compartment in order to free up capacity for other functions.

The bulk hangar bay was much larger. It could accommodate several transports at a time and played an essential role in keeping up the flow of goods.

In an emergency, the cargo hangar bay along with the vast and expansive cargo bays could accommodate several mech companies if necessary.

However, it was best not to do so. The primary role of the factory ship was to produce mechs and other products. It was vital to secure enough cargo space.

As the shuttle landed in the middle of the primary hangar bay, the hatch slid open. As the security detail exited first, Ves and Gloriana followed suit a moment later.

The moment his shoe landed on the deck, Ves felt an invisible shock running through his leg.

He had finally stepped foot on his new home!

Chapter 2574: Grand Captain Daria-Maria Vraken

This was a historical moment.

For the very first time, Ves stepped aboard a capital ship that did not belong to other powers.

Humanity classified any star-faring vessel that was over 1 kilometer long with this coveted label.

To be honest, this was an arbitrary designation. The definition of capital ships had changed throughout the course of history.

In the Age of Stars, any ship that was longer than 500 meters used to be considered a capital ship.

How times changed.

There were plenty of spacers these days who insisted that the definition for capital ships needed another adjustment. Ship lengths ranging from 2 kilometers to 5 kilometers frequently made the rounds.

The CFA, which was the foremost authority on starships in human civilization, never gave in to these requests.

Ves guessed that the fleeters didn't want to bother with this banal argument.

In truth, whether a ship was 1 kilometer or 5 kilometers long, when the vessel exceeded a certain scale, her mass and movement characteristics fundamentally changed.

Tiny corvettes and frigates resembled sparrows. Swift, agile and small, these vessels were capable of performing acrobatics in space.

Capital ships were akin to whales, though worse. They were huge, lumbering vessels that took a lot of time to get going and a lot of time and effort to perform even the smallest course correction.

When the dimensions of a starship grew, their tonnage grew by a geometric relationship. Of course, the exact growth was highly dependent on the specific ship design and how much 'height' and 'width' the vessel acquired.

The sub-light propulsion systems couldn't keep up with the rapid increase in mass. Unless a capital ship was specifically built for speed, they were always huge, slow and plodding.

This defined a capital ship in a nutshell.

Of course, in exchange for all of those downsides, capital ships offered more space and capacity than any other vessel.

For some people and organizations, this was an enormous waste. Many smaller and weaker groups such as mercenary corps simply couldn't justify the cost of operating such an extravagant vessel. It was much more economical to operate several bite-sized ships.

Ves was different. The Larkinson Clan was different. Even though Ves acknowledged that it was a lot cheaper to acquire a dozen logistical ships that could accommodate a couple of production lines each, they simply did not possess the might, majesty and prestige of a single capital ship. His new acquisition also offered several production advantages over smaller alternatives.

It was worth it to acquire this factory ship.

When Ves planted his other feet onto the deck of the primary hangar bay, he took in a deep breath. He smelled and tasted the filtered air circulated by the expansive life support systems of his new flagship.

Clean. Fresh. Maybe a bit too clinical. That would probably change over time. Every ship developed a unique air formula.

"Meow..."

"Miaow..."

Both Lucky and Clixie looked quite nervous to be on such a big ship. The Stellar Chaser and Scarlet Rose were much smaller frigates. They possessed a limited amount of decks and compartments, which made it manageable for the cats to claim their entire interiors as their territory.

This wasn't possible anymore! No matter how remarkable the two cats were, they would tire themselves out in no time if they attempted to patrol the entire length and breadth of the capital ship!

"Hehehe." Ves bent down to stroke Lucky and Clixie's backs. "Don't be scared. This ship is still ours. You just have to delegate responsibility to others."

"Meow?"

Both cats looked thoughtful at what Ves said.

As Ves consoled the cats, a small delegation of senior command officers approached the shuttle.

Ves looked up to see an authoritative, middle-aged woman saluting to the new owners of the factory ship.

"Mr. Ves Larkinson. Mrs. Gloriana Wodin-Larkinson. It is my proud honor to welcome you aboard the HHX-6963!"

The other Hexer officers saluted as well!

Gloriana assumed her formal persona. She gestured towards the lead Hexer.

"Introduce yourself."

"I am Grand Captain Daria-Maria Vraken, the interim commanding officer of the HHX-6963. The council of matriarchs has personally assigned me to captain this ship until your clan is prepared to nominate a competent successor."

Both Ves and Gloriana did not react well at the introduction.

"What is a Vraken like you doing here?" Gloriana frowned.

Her guarded posture caused Clixie to be on guard as well.

For her part, the so-called grand captain perfectly maintained her professional demeanor.

"I am one of the best capital ship captains in the Hegemony. You can inspect my public record at your leisure. I graduated summa cum laude at the most premier naval institution of our state. I have captained over three different capital ships, including a factory ship, over my half-a-century-long career. If you require more reassurances, I can give you a record of my certifications and accolades."

"Please do." Ves requested.

The grand captain immediately transferred over a document to his comm. When Ves inspected it, he became flooded by certifications, awards and other forms of official recognition.

Ves tried his best not to get lost in the hundreds of individual entries.

The medals and other rewards bestowed by the Hexer government signified that Captain Vraken was a very high performer. She learned more, scored higher and impressed her superiors at a far greater rate than her peers!

When Ves took in her diplomas and huge list of certifications, he discovered that the distinguished Hexer captain was proficient in both command and engineering.

Though she wasn't an engineer, she understood the basic theory and fundamental mechanics behind pretty much every single ship component. Whether it was thrusters, FTL drives, power reactors or shield generators, she possessed a decent grasp on how they worked.

The combination of all of this technical knowledge granted her a very good awareness on how to push a capital ship like the HHX-6963 to her limits!

Combining that with her excellent leadership, management and administration abilities, the grand captain assigned by the Hexers was truly the most impressive naval officer that Ves had seen!

Perhaps the monstrous officers of the CFA could easily crush Captain Vraken in terms of skills and knowledge, but that was an unfair comparison. It wasn't as if Ves could ever get a fleeter to captain any of his vessels.

Though Ves didn't like to put a Hexer in charge of his flagship, he recognized the necessity of keeping someone like Daria-Maria Vraken in such a critical position. It shouldn't be a problem to train or recruit an acceptable replacement before his expeditionary fleet entered the Red Ocean.

Naturally, whoever got to replace the extraordinary Hexer captain would never come close to being as good as the interim captain.

That was fine. The HHX-6963 did not necessarily require an inhuman captain in order to run her basic operations.

Every capital ship was like a very large company. The CEO at the top was merely responsible for issuing broad orders and making other high-level decisions. The middle management and the lower ranks did most of the actual work. Those positions were much more crucial to the Larkinsons.

"Please follow after me." The grand captain bowed and turned around. "While it is impossible to tour HHX-6963 in her entirety in a single day, I have prepared a very condensed tour that will bring you up to speed on the most essential decks and compartments of this fine vessel."

The newly-arrived group followed the commanding officer to the exit. Meanwhile, the other senior officers dispersed and returned to their stations.

When Captain Vraken led the clan patriarch and his wife past the fortress-like checkpoint, she approached a number of floater platforms.

"Please step onto this platform. Your bodyguards can utilize the other platforms."

They all did so. The floater platforms automatically hovered above deck and gradually began to accelerate forward at a brisk pace.

"As you can imagine, navigating through a capital ship can be very time-consuming." The interim captain explained. "Moving from one end of the HHX-6963 to the other end can take hours. Sheer distance as well as all of the hatches, checkpoints and other obstacles in the way can all slow you down. For this reason, these expansive hallways are split up into four lanes. The outer lanes are meant for foot traffic while the center two lanes are devoted to small vehicle traffic. Floater platforms like these as well as cargo bots and other vehicles will frequently travel back and forth."

Ves had already been on a ship with this kind of hallway setup. The Starlight Megalodon featured broader lanes. It was a shame the derelict CFA battleship lost too much functionality back then to make use of all of that space.

This was different. His factory ship became more alive as the newly-arrived Larkinson crew members as well as disciplined Hexer trainers began to populate the hallways.

Even the center two lanes saw traffic as a lot of incoming goods needed to be brought to the right compartment.

The interior design of the HHX-6963 was quite basic. The decks were gunmetal grey while the bulkheads and ceilings were coated in a pristine shade of white. A horizontal red stripes ran through every corridor of the factory ship. Frequently, this monotony was broken up by other markings and symbols.

Every so often, the bulkheads showed off the emblem of the Larkinson Clan and the logo of the Living Mech Corporation.

Perhaps the only trace of Hexer construction was the diagonal sides. Ves twitched his mouth as he noted the modest but conspicuously angled bulkheads. The angles weren't too sharp, so there wasn't too much wasted space, but Ves still felt annoyed that the Hexers hadn't been able to change this design choice.

Technical constraints, the Hexer shipwrights claimed. The Estrella Klavier-class factory ship was designed from the ground up with hexagon-sided hallways and hexagon-sided compartments in mind.

"HHX-6963 is this vessel's official designation, right?" Ves asked once he stopped studying the hallways.

"Correct, sir. This vessel does not have an individual ship name. The honor of naming this factory ship is left up to the client. Would you like to name her now? We can complete her registration and modify her exterior to reflect her identity."

Ves briefly turned to Gloriana, who didn't look too sure.

"Not yet. We're still thinking about it. There's no hurry."

"Very well."

The floater platform started to ascend up the decks. They were moving upwards.

The grand captain continued her tour. "The HHX-6963 possesses 66 decks in total. In general, the upper decks are dedicated to command, control, living and other high-level functions. The middle decks are mainly dedicated to engineering, power, life support, production and other heavy-duty functions. The lower decks mostly consist of cargo bays, supply storage, fuel tanks and other less-important compartments."

This was a typical starship arrangement. The higher the deck, the more unlikely it was to find a low-ranking spacer. Much of the sections and compartments that were dedicated to the actual functioning of the ship was concentrated in the middle decks, where they were well-protected against external attacks.

As for the lower decks, there weren't as many people there as most of it was taken up by cargo bays and other storage compartments.

There was a good reason for this arrangement.

"Due to the relatively low-priority compartments situated in the lower decks, it does not hurt us as much if this side of the HHX-6963 comes under enemy fire." Captain Vraken elaborated. "It is for this reason that the keel of this vessel is reinforced with extra plating. Only the bow is better armored."

Ves smirked. "The prow will become even thicker soon."

So far, the front of his factory ship was still a plain red-coated surface. It protruded forward like a short duck beak.

While it didn't look ugly, Ves had something a lot better in mind. In these past few months, Compartment G-13 aboard the Scarlet Rose had not been idle. The Larkinson Clan quietly stockpiled a huge amount of Breyer alloy.

Now that his factory ship was finally in his hands, he could finally make use of that splendid alloy!

Chapter 2575: Insane Security Check

Commanding a starship was difficult. As long as ships grew beyond the size of where a single spacer could perform all of the necessary functions, it became essential to rely on other people.

Back when Ves initially received the Barracuda, he witnessed how the corvette ran smoothly under the control of a small crew of close friends and comrades.

This was different.

The HHX-6963 was a beast with so much space, sections, compartments, components and other intricate systems that a crew of 2000 was only reluctantly able to keep her running!

Due to automation and the immense size of many ship components, it didn't take as many people as people thought to run a capital ship.

Naturally, relying too much on automation had its own dangers. After his jaunt aboard the Starlight Megalodon, Ves developed a healthy paranoia towards ships that relied too much on automation.

This was why he looked rather mixed as Captain Vraken began her tour at the most sensitive locations of the factory ship.

As one of the most crucial compartments of the vessel, security was paramount. The bulkheads were reinforced with thick, mech-grade armor. A permanent security detachment manned the checkpoint. Their heavy combat armor and their heavy assault rifles exerted a lot of deterrence towards anyone that strayed towards the heavy blast doors up ahead.

Ves and Gloriana showed no concern. Under the Grand Captain's lead, they subjected themselves to an extensive sweep and identity verification check.

The security checks were so thorough that the Miracle Couple even had to solve some randomly-generated design problems! This simple test practically closed the door to any infiltrators like Calabast. After all, how could a random spy ever possibly solve a Journeyman-level design problem within a very strict time limit?

In the absurd chance that someone dispatched a Journeyman Mech Designer who also happened to be trained as an infiltrator, there were other tests to make life difficult!

"As per your instructions, only you have the right to enter this critical compartment." Captain Vraken informed Ves. "No one, not even myself or your spouse has the right to pass through these blast doors. The only way we can enter is if you bring us inside."

Ves nodded in satisfaction as he underwent some other unique tests that he personally had a hand in designing.

After travelling through many places, he had witnessed many feats of exceptional tech. Just the capabilities the MTA and CFA had showed off was enough to make him dazzled!

While he could never guard against the might of the Big Two, he could still do his best to frustrate the attempts of anyone else from drilling inside this crucial compartment.

First, a security guard carefully approached and held up a device. Ves placed his hand on it. A small connection established from his finger to his implant.

"Implant verified."

After that, someone brought a scanning device that thoroughly scanned his chest.

"Organ verified."

Ves smirked. This was the identity verification procedure that Ves had devised with the help of Calabast.

It was almost impossible to replicate his Jutland organ. Sure, the CFA did so without effort, but that was because the fleeters possessed superior cloning tech and had ample access to monoexurite.

Other powers had to go through a lot more trouble. In order to clone or cultivate a Jutland organ from scratch, an exobiologist had to replicate the research performed by Dr. Jutland.

This was as difficult as trying to replicate Ves' design philosophy!

Even if someone accomplished this near-impossible feat, the infiltrator who implanted a perfectly identical Jutland organ also had to carry a highly-modified Archimedes Rubal 1002-Z Cranial Codex Implant!

The original advanced, first-class cranial implant may be a couple of centuries out of date, but it was still a product that was far out of the reach of any second-class power!

Only the Big Two and possibly the first-rate superstates were able to reconstruct the original implant.

Yet that wasn't enough. The implant had undergone extensive modification. Even if someone was able to reconstruct all of the updates and upgrades, they also had to store an immense cryptographic key in its storage space.

Aside from that, the cranial implant itself had bonded to his neurons and brain tissue in a very unique pattern. It was incredibly difficult to replicate the exact layout as each implantation attempt produced different patterns.

If anything went wrong, then the carefully-cloned or modified body that took immense effort to create had to be scrapped!

"What a devious set of hurdles!" Gloriana gasped as she observed the steps.

"Thank you." Ves grinned. "Although I don't expect this method to be infallible, it should stop at least 99 percent of our possible enemies. Besides, there is a final test that should account for the remaining 1 percent."

He approached a statue that depicted the ancestral spirit of the Larkinson Clan. He placed his hand on top of the head of the statue.

The statue was actually a totem that Ves had personally made. It not only served as an identity verification device, but also functioned as an alarm against any spiritual intrusions.

Ves had specifically designed it to guard against Lucky's mischief!

While he didn't possess enough B-stone to stop Lucky from phasing through all of the solid barriers, his cat wasn't capable of escaping the surveillance of the Golden Cat!

"Meow..." Lucky looked glum as he listlessly flipped his tail.

"Stop moping. I don't want you to sabotage what's inside and possibly ruin my brandnew factory ship. Just behave!"

"Meow!"

Ves turned his attention back to the statue. It only took a small amount of effort to excite the life contained within.

A powerful glow that made every Larkinson feel secure emanated from the totem!

If that wasn't enough, the two luminar crystal eyeballs shone in gold!

That was enough to pass the final test. Ves retracted his hand, causing the totem to fall asleep.

There may be infiltrators who were equivalent to Journeyman Mech Designers.

There may be infiltrators who possessed an exact copy of his Jutland organ.

There may be infiltrators who carried an exact replica of his Archimedes Rubal implant.

It may even be possible that someone found some way to fool the spiritual programming of his totem.

Yet Ves dared to bet that there shouldn't be anyone in existence who could pass through all four checks at once!

If some organization was powerful enough to defy his expectations, then what was the point? Anyone powerful enough to go through all of these hurdles might as well blow up his factory ship directly!

The heavily-armored guards deferentially stepped aside. "You are welcome to proceed, sir!"

"Good work, Battle Criers." Ves smiled. "Don't loosen your vigilance. Even if it's me, never skip any of the procedures."

"Understood, sir!"

Ves had entrusted the responsibility of guarding the interior of his factory ships to the Battle Criers. A lot of bonded infantry and security officers took up positions at crucial positions such as the bridge, the engineering bays, the production halls and so on. In short, the Battle Criers guarded over almost every critical section of his flagship!

He could have entrusted this responsibility to his other troops such as the Avatars of Myth or the Penitent Sisters.

However, he preferred to turn to the Battle Criers due to their dual loyalty guarantees. While the Larkinson Network guaranteed at least a basic degree of loyalty from his Larkinsons, it was mainly directed towards the clan as a whole rather than him as a person.

While the Battle Criers were subject to the Golden Cat's influence as well, they maintained a second form of loyalty, and that was their Kinner training.

Although Ves didn't actually know how the Kinners raised such hyper-loyal human products, he was very impressed by what he purchased. In the past couple of months, he purchased a lot of manpower from the Kinner Tribe.

While he hired a bunch of mech pilots and related support personnel, he was more interested in expanding his ground troops.

Of all the possible human products the Kinner Tribe sold, infantry soldiers was one of their most abundant offerings!

Ves had bought an entire elite infantry regiment at once. With over 2000 ready-made and trustworthy infantry soldiers at his command, he assigned them to his factory ship and some other critical vessels.

Of course, he did not put all of his eggs in one basket. He already prepared some contingencies in case the Battle Criers proved more fallible than he thought.

After Ves had passed all of the identity checks, several layers of blast doors finally peeled open.

Captain Vraken, Ves, Gloriana, Lucky and Clixie cautiously entered the highly-guarded vault.

They looked around. A lot of sophisticated databanks and computing equipment quietly hummed inside the metallic space. Specialized cooling solutions kept the temperature under control.

"Welcome to the primary data vault, otherwise known as the brain of the HHX-6963." Daria-Maria Vraken solemnly introduced. "It is here that much of the data of the ship is stored. It is also here that a lot of intensive data processing takes place. While these data banks and other hardware are some of the best the Hegemony has ever produced, the real prize rests in the center."

The group moved forward until they approached a pedestal placed in the middle. Two metal pillars extended from the deck and ceiling. They projected a strong energy field that caused a head-sized metal ball to hover in between.

Captain Vraken couldn't maintain her professional and unreadable expression at this moment. A look of sheer reverence briefly broke her mask!

"This, Mr. and Mrs. Larkinson, is one of the most valuable components on this vessel. This is the ASTERA Artificial Intelligence Core. On its own, this modestly-sized core already surpasses the capabilities of all of the surrounding data banks and processors! With this powerful core, you can perform the most powerful and intensive calculations without having to wait for an eternity to obtain your results. Compared to regular Al cores, this unit is up to 2000 percent more effective!"

This was an incredibly powerful AI core! With a super core like this, the HHX-6963 was able to break through powerful ECM measures, calculate precise long-ranged FTL traversals, perform incredibly detailed mech simulations, among many other benefits!

In truth, the regular data processing machines in the primary data vault were already sufficient to support the daily operations of the flagship. Ves specially allocated a generous proportion of his budget on acquiring the ASTERA when he saw the Hegemony was willing to put it on offer.

Its performance was simply too good to pass up! He knew that ordinary people should never have access to something as powerful as the ASTERA. If Ves and Gloriana hadn't impressed the Hexers with their impactful mech designs, then the shipyard that built the HHX-6963 would have never been allowed to integrate such a precious component.

"Where does the ASTERA come from, exactly?" Gloriana puzzlingly asked.

"The Hegemony redeemed it directly from the Common Fleet Alliance." Captain Vraken answered. "The invasion of the sandmen has led to the culling of many sandman admirals. The CFA has taken in many broken or inert sandman admiral 'bodies' and converted them into standardized starship Al cores."

"How could the CFA let go of something so valuable?!"

The captain smiled and shook her head. "You misunderstand the ASTERA's value. To us, it is immensely powerful. To them, it's a defective product. The CFA only demands the best. The fleeters have only kept the AI cores made out of the largest and most intact sandman admiral cores. As for this unit, it's actually made out of an incomplete fraction, a tiny shard if you will. It is a given that the CFA does not value such a weak AI core."

Ves, who intended to make full use of the ASTERA's amazing processing power, tried his best to suppress his tech envy. The CFA's AI cores were probably at least billions or even trillions times more powerful!

"We are more than happy to pick up their trash."

Chapter 2576: Starship Avatar

Trash or not, Ves doubted that he'd be able to get his hands on a better Al core. That 2000 percent edge in processing power was no joke!

With so much raw calculation power at his disposal, the productivity of his Design Department would certainly skyrocket!

Modelling that took days to complete in the past could now be done in hours. Many smaller simulations and calculations that previously delayed Ves and the other mech designers for several minutes could now be obtained at an instant!

What was even better was that the ASTERA was not just a simple processor, but a comprehensive AI core made by the CFA, the foremost authority on automation in human space!

The fleeters were highly-obsessed with developing artificial intelligences to facilitate or even take over the operations of their incredibly advanced warships.

Ves had a very profound impression of the CFA's advances in this area from witnessing the operation of the virtual officer system aboard the Starlight Megalodon.

Of course, that unforgettable CFA battleship also taught him a profound impression on the perils of rogue Als!

Naturally, the ASTERA was different from that ominous mainframe that Ves had foolishly unlocked.

The sentient AI that called itself Sigrund arose from reckless experimentation from the crazed survivors of the Starlight Megalodon's crash. The CFA researchers aboard that ship were either influenced by or outright belonged to the Five Scrolls Compact!

In contrast, the ASTERA was made in a highly-controlled environment in a proper CFA facility. Its main ingredient was just an incomplete shard of a deceased sandman admiral. This was incomparable to a complete and possibly living sandman admiral body!

These differences were enough for Ves to put down his worries about the ASTERA possibly going rogue. The circumstances that birthed a monster like Sigrund simply weren't present in his factory ship.

That suited him fine. He had no need for anything greater. With the incredibly capable deep learning and adaptive programming of his new data core, the ASTERA was able to become more and more efficient at performing the same kinds of calculations.

This meant that an operation that might take 3 hours to complete may take just 1 hour to finish in the future!

Gloriana recognized the incredible benefits brought by the ASTERA.

"With this AI core, we can complete our design projects at least 20 percent faster! We don't have to worry about any of our current design projects "

"Exactly." Ves nodded in satisfaction. "Our factory ship is worth it for this AI core alone."

It was a huge waste to put something so powerful in a sub-capital ship. Only a proper capital ship like the HHX-6963 was eligible to integrate such a powerful starship core.

As the interim captain explained the AI core's various uses, she brought up an interesting proposal.

"In order to make it easier to operate this core, you can permit it to form a virtual avatar. Many people prefer to personalize their interactions with AI cores."

"Let's do it, Ves!" Gloriana eagerly urged.

"I don't know..."

"Come on. A high-quality AI avatar is one of the essential characteristics of an excellent starship. What would our guests think if our factory ship is missing such a function? If we want to make new friends in the Red Ocean, we need to show off our luxury!"

"If you insist." Ves acquiesced to his wife. "Captain Vraken, can you guide us through the steps?"

"Certainly. The procedure is not complicated. You mainly have to make some personal choices. No matter what kind of avatar you specify, do not forget that you are dealing with a rigidly-programmed AI. It is not alive nor able to exert any independence. It's a machine, just like your cat."

"Meow!"

Lucky objected to that designation! He was not a regular mechanical cat. He was a gem cat, and a living one at that!

"Hehe. Settle down, boy. She means no harm." Ves quickly bent down to calm down his pet.

Though Gloriana and some other people knew better, to everyone else, Lucky was just a very well-designed mechanical toy. The more lifelike the creation, the greater its quality. Yet no matter how good an AI imitated life, it ultimately lacked emotion.

To Ves, Lucky was far from just an AI. Ves could personally perceive the strong spirit and emotions of his supposed artificial pet. That was enough for him to treat his gem cat as a living being. The only downside was that it was not convenient to reveal Lucky's true nature to others.

With Ves' permission, Captain Vraken activated a small interface and began to input some commands.

Soon enough, the interface displayed a lot of avatar templates that Ves could choose from to personalize his AI core.

Ves scrolled through the options. There were many human templates, but that didn't interest him for long. He swiped some menus and came to a page that displayed many different cat-shaped avatars.

"That's better."

Gloriana's eyes lit up. "Look at that Maine Coon! Isn't it fluffy?"

Clixie pointed her paw towards a Rubarthan Sentinel Cat that possessed the same tufted ears as hers. "Miaow miaow!"

"Meow." Lucky floated over and bumped his nose at a mechanical cat with a silvery exterior.

Ves pushed his cat away. "Get lost. I'm settling for this one!"

He selected his finger on an electronic cat form. He wanted an avatar that was different from Lucky, Clixie and Goldie. For this reason, he selected a cat whose body was made out of rolling blue numbers. The electronic cat exuded a very techy vibe.

"It's certainly different." Gloriana admitted.

"Meow"

"Miaow miaow."

Nyaaa?

Even Goldie didn't know what to think about the new cat!

Now that Ves had made his choice, he had the option of specifying its simulated personality. He opted to instill the AI avatar with a calm, obedient, patient, diligent and helpful personality.

In other words, the opposite of Lucky.

When he came to the option of choosing the gender of his electronic cat, he briefly skimmed through the options. The choices ranged from male, female, nonbinary and even weirder ones such as 'black hole' and 'quartenary illuvian gender'.

It only took a few seconds for him to make up his mind.

"Wait!" Gloriana walked up and held his arm. "The avatar has to be female!"

Ves didn't give in to her request this time. He peeled her fingers off his arm and firmly pressed his finger against the physically projected button that denoted the male option.

"Why, Ves?!"

"We already have Clixie and Goldie." He calmly explained. "If we turn our electronic cat into a female as well, Lucky will be all alone as the sole tomcat. Don't you think that is seriously unbalanced?"

"I don't see the problem in that." She responded.

"Well I do, and my opinion matters more. Don't forget who is in charge of this factory ship."

The ownership of the factory ship was rather complicated, but Ves had the greatest say in matters.

Much to Gloriana's dismay, the ASTERA AI core finally formed an elegant, blue electronic cat in midair.

Fortunately for Ves, Gloriana didn't remain upset for long. The cat avatar's proportions were perfect. She had never seen a more aesthetically-pleasing cat in her life!

"What a cute fellow!"

The newly-created avatar settled his glowing purple eyes on Ves and adopted an attentive sitting posture.

Ves smiled and stroked the electronic cat's head. Due to the physical projection technology integrated in the compartment, he felt as if he was touching a real surface.

The new cat began to speak in a young, boyish voice.

[Virtual avatar established. ASTERA-35762 is at your service, Mr. Larkinson. Do you wish to finalize your choice?]

Ves frowned. "I don't want you to sound like a little boy. Please change to an older and more mature voice. Try a formal butler-like voice and accent, just like in all of those historical dramas."

The avatar instantly switched his speech.

[I have executed your instructions.] The electronic cat said with a much more pleasing voice. [Are you satisfied with your choice?]

Ves grinned. "Yes! You don't need to change this anymore. I'd like to add one more instruction. When I give a specific command, I'd like you to change your human speech into cat speech. Your avatar is not complete unless you can cry like a cat."

[Very well, Mr. Larkinson. I have generated a pattern of unique, expressive cat cries.]

"Activate Pet Mode."

[Mew. Mew. Mew.]

Both Lucky and Clixie jumped back at the sudden transformation! The avatar played the role of a cat too well!

"Meow!"

"Miaow!"

"Okay, that's enough. Switch back to Assistant Mode."

[Exiting Pet Mode. Would you like to make any more changes, sir?]

"Yes. You need a name. From now on, you are called Bygul, understood."

[Name set. I will now respond to the designation 'Bygul'. Do you wish to make further alterations, sir?]

"No. Please finalize your avatar and return to standby. I will specify your programming later."

[Very well, sir. Confirming your choices now. Please note that you are only able to alter the parameters of this avatar and change other important settings by accessing this ASTERA AI data core in person.]

The blue electronic cat disappeared as the physical projectors returned to standby.

"Let us proceed to our next destination." Captain Vraken suggested.

Ves nodded. "Lead the way, captain."

Everyone aside from Ves and the captain looked bewildered at what they witnessed. Even though Gloriana and their cats knew that Bygul was not a real living cat, the CFA's programming was simply too good. The virtual avatar could probably pass a harsh Turing test in a very convincing manner!

Still, the way that Ves judged whether an artificial creation was alive was different from that of other people. To him, spirit was the root of life. No matter how well Bygul pretended to be a sentient cat assistant, he would always be a set of programming code to Ves. This was why he specified the avatar to adopt a body made out of projected numbers.

Captain Vraken didn't move too far from the primary data vault. Even though it was situated a little high, the 6th deck of the factory ship housed a lot of important command and control functions.

The group reached another checkpoint. The security procedures this time weren't as strict, but the blast doors were almost just as thick and resilient.

As soon as they passed through, Ves and Gloriana were momentarily taken aback by the huge and expansive hall stretching out before their eyes.

Captain Vraken proudly swung her arm at the stretch of consoles, work stations, projections and impressive seats. "Welcome to the bridge of the HHX-6963. This is the main command center that can govern the entire factory ship."

"There is also the Combat Information Center in the middle decks, right?" Ves asked.

"Correct, Mr. Larkinson. The CIC is situated in an even better-protected section of the HHX-6963. It can be utilized to command your entire fleet or serve as a backup option if this bridge ever loses function."

To be honest, Ves didn't expect too much use from the CIC. Dedicated fleet carriers were much more suitable ships for Major Verle to command a battle from. However, in the absence of choice, the HHX-6963 could do the job in a pinch. It was just that her sensor systems and communication systems weren't geared for this purpose.

Ves and the others walked around the bridge. There was space for hundreds of bridge officers and specialists, but only 50 or so were present at the moment.

As long as his fleet wasn't in battle, it wasn't necessary to man every bridge station. In fact, if needed, only a couple of people could control the factory ship from the bridge, though the loss in efficiency was horrendous.

Ves approached some fake windows. It depicted a very realistic view of the space in front of the factory ship.

Captain Vraken stepped next to him. "The bridge is situated close to the center of the 6th deck. Any attacks will have to go through a lot of obstacles. Even then, the reinforced bulkheads and other protective layers will do their best to block any threats. In order to ensure the safety of this bridge, it is impossible to place it close to the exterior."

"It's fine. A good view of the action is not worth exposing the bridge. I'm not that stupid."

Chapter 2577: More Superior Than Others

Some ships, particularly civilian ones and leisure-oriented ones, featured bridges set on the exterior of the vessels.

As long as the demand was there, shipwrights were willing to design whatever their customers wanted. Plenty of starships journeyed through the stars while exposing their bridges to external attacks.

Suffice to say, the chances that these idiotically-designed starships got taken out with relatively little effort were very high!

Only the safest star sectors where piracy and instability didn't exist featured these ship designs.

In the less secure portions of space, it was best to choose safety over beauty. No amount of aesthetics mattered if the primary command section of a starship could be taken out by a single, powerful long-ranged attack.

The bridge of the HHX-6963 was nestled deep in the center of the 6th deck. However, the CIC was located in an even deeper portion of the factory ship. Any attacker had to go through dozens of decks in order to breach the latter!

Captain Daria-Maria Vraken looked around the bridge and settled her gaze on the throne-like seat reserved for the master of the factory ship.

"You can probably find me here when I am on duty, though I will certainly be visiting many other compartments as well. In battle, I will command the HHX-6963 from this bridge. The executive officer shall be coordinating the defense of this ship from the CIC. For now, this post is open. I recommend you nominate whoever you wish to take over my captaincy."

"That's going to be difficult." Ves responded with a sigh. "Our Larkinson Clan has expert pilots, expert candidates, mech officers and veterans. We are not short of talented and competent mech pilots. However, our shallow foundation as a spaceborn organization

has left us short of starship captains such as you. We don't have anyone worth nominating to this position at this moment."

The Grand Captain frowned and turned to Ves. "You should remedy this shortcoming as soon as possible. I am only the interim captain of the HHX-6963. My role is to train a captain so that your factory ship will not crash into an asteroid some day. The Hegemony's starships deserve better."

He chuckled. "Even a dummy isn't stupid enough to crash a capital ship in some random object. There are so many people here that no one can single-handedly ruin this precious vessel."

"You'd be surprised what incompetent people are capable of. In the event this factory ship encounters a space storm or is caught in an unstable anomaly, you need a calm but quick-witted captain to make judgement calls in the span of a few seconds. The captain cannot be too slow, but also cannot afford to make the wrong decisions. The difficulty of fulfilling both standards becomes exponentially more difficult when the ship gets larger."

Ves grew more and more depressed as Captain Vraken outlined the harsh demands. Perhaps she was exaggerating a bit, but she shouldn't have strayed too far from the truth.

"Are you interested in becoming the permanent captain of this factory ship?" He probed.

The woman did not flicker any emotions. "No, sir. I am a Hexer. It is my duty to serve the Hexadric Hegemony. If the council of matriarchs hasn't given me this assignment, I would not have chosen to leave my state at its time of need."

"I take it you're a member of the Vraken Matriarchal Dynasty." Ves changed the topic as he admired the view of the fake windows.

The augmented view depicted the other ships of the Larkinson Clan in vivid detail.

"Correct, sir." The older woman confirmed. "I belong to the most intelligent and farsighted matriarchal dynasties of my state."

"That's quite a boast."

"Women are superior, but the Vrakens are more superior than others. While we proudly call ourselves Hexers, we do not mindlessly let our biases and emotions lead us by the nose. To defeat the Friday Coalition, we have to outsmart them. It is futile to compete against brutes in head-on battles."

Ves raised his eyebrow. "I don't know about you, but from what I see, the Hex Army is pretty much doing the latter. From the start of the Komodo War, all I hear are stories

about Hexer mech divisions throwing machines after machines at the Fridaymen. Your enemy is doing the same thing as well. I haven't seen much finesse and outmaneuvering so far. If you Vrakens are truly 'superior', then you would have been able to convince the other Hexers to adopt a more prudent strategy."

The stiff grand captain did not fluster. "The other matriarchal dynasties are not as enlightened as us. It is clear to see that they have made some grave mistakes. It will only be a matter of time before they understand that our suggestions are better."

"When will that take? I have a feeling that many of your stubborn Hexers won't see the light until the Hegemony is at the brink of losing the Komodo War."

"The war will not reach that point." Captain Vraken confidently stated. "If anything, your work is vital to thwarting the Fridayman offense. As long as I captain this ship, I will endeavor to prevent as many problems as possible. My crew and I will do all we can to provide you with the best environment to design your mechs."

"Uhm, thanks. Don't expect too much from us, though. The Fridaymen have found a very tricky way to gain an edge over the Hex Army. It is difficult to resist a disparity in expert pilots."

This was something that even the supposedly superior Vrakens were unable to solve.

Just before they resumed the tour, Ves asked one more question.

"By the way, do you happen to be a DIVA agent?"

The woman faced Ves with a highly-controlled expression. "Why would you ask that question, Mr. Larkinson?"

"I happen to have a former relative of yours in my staff who used to work for DIVA."

"I am aware of who you are referring to. It is no secret to us that 'Calabast Arnlend' has decided to become a part of your clan."

"You don't sound very happy."

Daria-Maria glowered. "She has enjoyed the highest degree of training that our dynasty can offer to her. It is a shame for her to forget who has made her great and abandon the proud Vraken name. Now of all times is when we need the services of a highly-competent intelligence operative."

"She is helping the Hegemony by helping our clan. That in turn allows me and my fellow mech designers to design the Hexer mechs your state has derived a lot of benefits. I think that is good enough to make up for her early departure."

"I am of a different mind on this topic, but let us end this discussion. Miss Calabast has made her choice, and the Hegemony has accepted that. It is not my place to intervene."

After taking in the expansive and luxurious bridge, the tour continued.

The group headed all the way to the 1st deck or the top deck.

Captain Vraken guided Ves and Gloriana to an enormous garden compartment. It was just as pleasant and infused with nature as the Hex Garden!

"Welcome to the forward observation chamber. As you can see, hear, smell and touch, this immense compartment is an excellent recreational and relaxation destination. There are pools with fish and pools for swimming. There are grassy plains that are suited for sports and other activities. There are benches and tables should you want to dine here or spend some time to relax."

"Meow!"

"Miaow!"

"Hihihi." Gloriana giggled. "Our cats love it here. I think they'll be spending lots of hours in this garden!"

Both Lucky and Clixie ran through the brushes, climbed up the trees, chased after some butterflies and even caught a tiny fish from one of the ponds!

The humans approached the huge forward windows.

This time, the windows were real. The forward observation chamber was situated at the bow of the factory ship. No matter what kind of hard, transparent material the windows were made of, it was easier to breach it than to penetrate through many meters of solid alloy!

The captain gestured back at the garden. "The forward observation chamber is meant to serve as a quiet relaxation and recreational area for the officers and VIPs of the HHX-6963 and their pets. Naturally, you and your mech designers are also on the list. That said, I advise you not to linger here during FTL transitions, crises and times of elevated danger."

The well-designed interior soothed Ves a lot. All of the greenery reminded him of the time when he lived on Cloudy Curtain. The only difference was that the lighting was a lot better in this enormous chamber.

With a great environment like this, Ves probably didn't need an ark ship to stave off his cabin fever.

"There is also a rear observation chamber that is open to the enlisted crew. While you may access it, I do not advise you to do so. The lower-ranked spacers won't truly be able to let down guard if their bosses are close."

"Understood. Don't worry. I'm not that bored."

There was nothing special about the forward observation chamber, so Captain Vraken quickly led them out. She guided the group down a number of decks until they reached the 12th deck.

This was another recreational-oriented area. Ves felt as if he had entered a condensed space station. Streets, shops, restaurants, parks and other leisure venues dominated this deck.

There were even schools to keep the children of the crew member occupied!

"The HHX-6963 is capable of housing tens of thousands of crew." The captain said as they passed by an empty cafe. "When the population of a starship reaches this height, it becomes more and more important to foster a healthy community. This deck will do much to keep our crew sane and in good spirits. Without this artificial city, it is too easy for people to equate this capital ship to a prison. That is not ideal, to say the least."

Right now, the city wasn't under operation. Only a small amount of venues had found new owners. The people who wanted to make the city alive were mostly spouses of professionals or retired veterans with no other obligations.

The city was not that big, but it was more than enough to provide the illusion of normality to the crew.

The group moved on from the 12th deck and descended to the 16th deck.

"The 16th deck is the accommodation or living deck. This is where the staterooms of you and the officers are situated in. There are also other compartments on this deck that are not as important. The enlisted crew reside on another deck."

In other words, only the bigwigs got to reside on this deck.

Captain Vraken led the group to a hallway with some very distinguished-looking set of hatches. Another security checkpoint manned by armed Kinner guards stood on guard.

"The HHX-6963 boasts six grand staterooms. They offer the best possible accommodations aboard this vessel. For now, only two out of six of these compartments are occupied."

The first grand stateroom belonged to Ves and Gloriana.

Ves assigned the second grand stateroom to Juliet.

As for the other four, Ves was not in a hurry to allocate them. He would wait for Ketis and some of his other assistants to advance to Journeyman before giving them the honor of occupying one of these six chambers.

As the pair entered their new living and sleeping quarters, they became impressed by what they saw. Gloriana personally designed the interior, though Ves had intervened as well in order to prevent her from going overboard with Hexer decorations.

The grand stateroom was pretty much a modest-sized mansion condensed into a section of the 16th deck. It was divided into several large rooms such as a foyer, living room, library, private offices, multiple bedrooms and multiple bathrooms.

Gloriana grinned in satisfaction as she inspected the different bedrooms. "Our kids will love it here!"

Chapter 2578: Ship Home

Each grand stateroom offered unmatched luxury. Fine wooden, metal, composite and stone furniture filled up the partitioned rooms. Aside from looking exquisite, they also gave Ves and especially Gloriana a sense of ownership.

From today onwards, this little mansion within a ship would become their permanent home.

While the grand stateroom still lacked a personal touch, there was plenty of time for the married couple to turn it into their sanctuary. They may be living here for decades or even centuries. Ves already planned to craft a custom desk and chair in order to spice up his private office. Gloriana had much bigger plans in store.

"I love it here!" She grinned as she walked up to him and pulled him into an embrace. "One home like this is worthy for us. It's going to be so much better once we get to decorate it even further. I need your help in order to make it perfect!"

She enthusiastically babbled some requests. In particular, she wanted to set up the private worship room with a shrine that was 'blessed' by the Superior Mother.

She also wanted him to create a bed that carried the same 'blessing' as well!

Suffice to say, Ves immediately grew alarmed at this request.

"No!"

"Why not?!"

"I don't want my mother snooping in on us when we're in bed! Can't we enjoy a little privacy?"

"I want her to bless our future children."

"The Superior Mother is not some kind of universal medicine, Gloriana! Don't pull her in for every single matter."

The couple argued about this a little before they came to a rather unsatisfying compromise.

They decided to make two beds. One of them would be a carved stone queen-sized bed themed around angels.

Considering that both of them frequently interacted with glows, Ves thought it would be prudent to rest under Lufa's influence. The angel-like spiritual product possessed a calming and tranquil glow that worked well in easing people's stress. With the heavy responsibilities that Ves and his wife assumed, ending the day in a spiritual and physical sanctuary should give them the best rest that they could ever enjoy.

However, in order to satisfy his wife's childbearing demands, Ves agreed to make a second bed out of carved wood. She wanted him to incorporate some Hexer style elements and even carve out a tall headboard that made it seem as if the Superior Mother was looking down on whoever was sleeping in the bed!

Though Ves found her proposed design to be a little disturbing, he consoled himself by her promise that she only insisted on sleeping in it when she was pregnant.

Gloriana grabbed his arms and stared at him with a hungry expression. "We need to provide the most perfect growing environment for our babies. There is no one better than the Superior Mother who can ensure our babies will grow strong and healthy. I will not allow you to squander this opportunity!"

"Okay, okay! I get it. I'll invest plenty of effort in making this bed. Are you happy now?"

"Definitely!"

She was so happy that she instantly glomped him and pulled him into a kiss. After a passionate make-out session, she pulled back and began to explore the bedrooms reserved for their children.

"Women." Ves tiredly sighed as he readjusted his uniform.

"Meow."

"Miaow."

The two cats were both perched onto a large, soft cat bed. The stateroom was not only a paradise for Ves and his family, but also their pets!

Various cat toys, scratching posts, obstacle courses and little cat doors ensured that every feline would be able to keep themselves entertained.

He spent the remaining time allotted to exploring the grand stateroom on inspecting the kitchen, library, living room and other areas. Though the Hexers had already furnished them with excellent furniture, there was abundant room for more.

If he wanted to transform this space into his real home, then he had to surround his living with his own style. Gloriana had the exact same idea. He envisioned a lot of arguments in the future on how to decorate their shared spaces.

"Well, whatever. We'll just split it up if we have to. At worst, I'll just move out to one of the vacant grand staterooms."

When the couple finished touring their new home, Captain Vraken led them out and briefly showed them the other cabins set up for long-term occupancy.

"The HHX-6963 offers plenty of space for living accommodations. Due to her potentially large crew complement, not every crew member can live in compartments as extravagant as yours. Here you can see a greater stateroom. While it is only a fourth the size of a grand stateroom, it still offers plenty of room to house an entire family with comfort."

As Ves quickly explored the greater stateroom, he found it to be more than enough for him to live in. It was akin to a normal house if built on land.

To be honest, the grand stateroom that he and his wife had claimed was too big. Ves didn't exactly need all of that space to live in comfort. Still, his demanding wife would never accept anything smaller so he didn't voice any objections.

"This is a good room to live in for senior officers, chief engineers and other key personnel." Ves remarked.

"Exactly." Captain Vraken nodded. "The HHX-6963 offers 66 greater staterooms in total. Our senior officers, vital personnel and any important guests will be able to live in comfort here. There are also 666 staterooms that are suitable for our junior officers and other mid-level personnel such as chief technicians and the mech pilots of our bunker mechs. By providing them with comfortable living spaces, their productivity will always be high."

Sadly, the rank-and-file crew members didn't enjoy these luxuries. They had to make do with smaller and more compact berthing compartments.

The only consolation was that the individual living quarters were adjustable. If the HHX-6963 had to accommodate more than 100,000 people, then it was best to make the cabins smaller so that more of them were able to fit the 39th and 40th decks.

If for some reason the factory ship had to accommodate even more people, then it was possible to place multiple bunk beds in the individual cabins.

Captain Vraken wasn't in favor of this measure, though. "I don't advise you to do this unless it is necessary. The HHX-6963 doesn't need so many crew. Considering that many crew members will live on this ship for years, we need to give them enough space to raise a family. By controlling the numbers on this ship, we can provide each crew member or family unit with a modest-sized cabin that offers as much space as a decent apartment on land. That should be more than enough to meet their long-term needs."

"I'll take that into account." Ves nodded in understanding. "After all, our clan doesn't have a foundation on land. All of our crew has no choice but to make this ship their home."

He knew that this wouldn't be enough to keep every single crew member happy. The factory ship may provide more amenities than sub-capital ships, but she was no substitute to living on a real planet.

The greatest shortcomings other than the lack of space was the constant confinement and absence of strangers.

Someone who lived on a normal planet could always live in their towns and cities to explore other places. That simply wasn't possible for the crew of his ship. The lack of people who weren't Larkinsons also threatened to make his clansmen more insular.

Ves didn't have any good solutions to this problem. He had to obtain an ark ship in order to mitigate these issues.

After Captain Vraken finished explaining the living conditions of the crew of the HHX-6963, she finally guided the group towards the most essential sections of the capital ship.

"The production halls are the reason for this ship's existence. The compartments housing the valuable production lines stretch all the way from the 18th deck to the 36th deck. Along with some storage compartments, repair facilities and other related functions, the middle decks are equivalent to an entire industrial complex."

When the group entered one of the production halls, they became dazzled by the brandnew high-quality production equipment. In order to fabricate a wide variety of high-end second-class mechs, the production lines incorporate a lot of specialized machines that were very capable of producing specific components.

There were crystal synthesizers that could produce larger, denser and more flawless luminar gems.

There were forging machines and alloy compressors that could fabricate very hard alloys that were notoriously difficult to shape.

There were heavy-duty assembly systems along with an extensive suite of powerful bots that could lift tons of metal at a time.

The production halls even offered fine, localized control over the artificial gravity in the halls!

This meant that it was possible to selectively eliminate gravity on a machine while it was producing something delicate. It was also possible to lighten a mech frame so that it didn't take as much time and effort to assemble or disassemble a product.

The pair reverently approached the most important production machine. The 3D printer was the all-rounder and most versatile piece of equipment in a production line.

Back when Ves just started out, he relied entirely on 3D printers to fabricate his mechs. It was only later on that he started to make use of other specialized equipment. Stronger and more sophisticated mechs often imposed greater demands that could only be met with dedicated production equipment.

At the present, a single production line consisted of over 12 primary production machines!

Yet no matter how many toys he added to the production lines, the 3D printer still played an essential role. The higher the quality of the 3D printer, the greater the variety of parts it could produce.

More expensive 3D printers were even able to substitute the role of many specialized machines.

As much as Ves wanted to fill up the production halls with every possible primary production machine that he might need, he needed at least double the space. That simply wasn't doable aboard a starship with a finite amount of space.

Therefore, centering a production line around an excellent 3D printer was essential. When the Hegemony expanded the budget for his factory ship, Ves had invested a considerable portion of the extra money towards upgrading the 3D printer model of all 20 production lines.

Captain Vraken looked up at the giant cube that exceeded the size of an entire mech. "This is the GAIA A-35 3D printer. You probably know more than I about its characteristics, so there is no need for me to explain its capabilities."

Both Ves and Gloriana looked dreamily at this excellent 3D printer. It offered excellent precision, speed, flexibility and more importantly automation.

Many of the best manufacturing complexes in the Hegemony utilized the GAIA A-35 or similar models! The production line centered around this lauded 3D printer was capable of fabricating almost any standard military mech model in the Hex Army's lineup!

"With our GAIA production lines, we don't have to limit our mech designs on account of production difficulties." Ves stated.

This was an immensely important benefit! If he didn't have these high-quality machines, then he wouldn't be able to produce strong and sophisticated mechs such as the Transcendent Punisher or the Valkyrie Avenger.

As Ves wanted to supply his elite mech forces with premium second-class mechs, it was essential to invest in high-end production capacity. Now that he satisfied this requirement, he wouldn't have to worry about any design constraints in the development of his standard mechs for a very long time.

Of course, the GAIA production lines were still a bit inadequate when it came to the production of expert mechs and other top-end second-class mechs.

"Please show us our workshops." Ves requested. "Whenever we want to produce something, we won't be making use of these production lines."

The GAIA production lines were all geared towards mass production. While they were good at churning out lots of standard mechs at a high pace and a consistent level of quality, they were not good enough for the likes of the Miracle Couple!

Chapter 2579: GAIA and ELKINE

The GAIA production lines consisted of production equipment that were geared towards mass production.

This meant that they aimed for the highest possible quality within a few important constraints.

First, they had to be fast enough. If it took twice as much time to produce a mech, then the mech company in question was practically losing a lot of money due to having less mechs for sale.

Second, they had to be easy enough for mech technicians to operate them. The production machines had to take the limited capabilities of average factory workers into account.

Of course, different production machines imposed different minimum skill requirements. The GAIA production line was quite advanced, so the mech technicians had to be a lot more skilled and knowledgeable than normal in order to produce high-quality mechs like the Transcendent Punishers.

Right now, the best mech technicians of the Larkinson Clan were still not up to par. They needed to explore the capabilities of the GAIA production lines and engage in a lot of trial and error in order to become proficient in handling the advanced second-class production machines.

As for mastering the machines, Ves didn't think that any of his chief technicians or mech technicians could accomplish this exceptional feat. He would have to hire experienced second-class mech technicians and fabricators in order to fully utilize his production lines.

That was far too troublesome. He would rather nurture his current production crews and set up an in-house school to raise qualified mech technicians from within.

While this approach won't bear any fruit for at least a decade, the results would be worth it. Only by setting the curriculum for his future production crew would he be able to instill his preferred production approach to them. In order for his factory ship to pump out consistently high-quality mechs, he needed to raise mech technicians that treated the mechs they made as living entities!

Aside from the strict manpower requirements, the GAIA production lines also came with another downside.

Captain Daria-Maria Vraken pointed at a thick power line along the way. "When any of these production lines are working at full capacity, their energy consumption is massive. If all 20 lines are active, then the HHX-6396 barely has enough spare power left to run her other basic functions."

"I'm aware that this factory ship doesn't have enough power to keep both her production lines and shield generators active at the same time." Ves spoke. "She doesn't need to, though. There's no way we'll allow our production crews to calmly fabricate mechs when our ship is fired upon. That's just stupid."

"That is not the issue I am trying to draw attention to. Consider how much energy these hungry shield generators and production machines consume. How much money in reactor fuel do you think the 16 primary power reactors aboard the HHX-6963 will expend in order to supply all of that power?"

Neither Ves nor Gloriana knew the answer.

"32 million hex credits per day." The grand captain answered. "In a year, that amounts to more than 11 billion hex credits."

"What?! So much?!"

Let alone Ves, even Gloriana was shocked at that sum!

"Please take into account that this is only a portion of the upkeep cost. While it is unlikely for all 16 primary power reactors to operate at maximum capacity every hour of the day, there are many other expenses such as payroll, maintenance, sub-light propulsion fuel and other consumables. These are the costs you need to bear for adding a very capable factory ship to your fleet."

Given the expected circumstances, Ves would probably have to reserve at least 10 billion hex credits to cover the annual expenses of his factory ship.

What was worse was that the supply and market price of reactor fuel varied depending on the region!

Captain Vraken issued another warning. "In the Komodo Star Sector, you cannot find that many refineries that are capable of refining the specific type of high-grade, second-class power reactor fuel. Only a few dozen refineries in the Friday Coalition and Hexadric Hegemony were able to meet the factory ship's energy needs. I've already checked the price of power reactor fuel in the Red Ocean. Depending on the specific zone, you might have to pay ten times the prevailing market price in this star sector!"

Ves almost suffered a heart attack at the thought!

Even if he made good use of all 20 production lines to produce a lot of mechs, he might have to sell at least a 1000 premium second-class mechs a year in order to keep the voracious power reactors fed!

While this was not an impossible task, it was a heavy burden to the Larkinson Clan. It became more and more important to ensure that the LMC's business operations in the Yeina Star Cluster remained operational even after his expeditionary fleet departed for the Red Ocean!

"Not every factory ship is as expensive to run." The older woman noted as they passed through hall after hall. Each of the large spaces hosted an identical production line. "If you opted to add less production lines, opt for lower-end production equipment, leave out the shield generators and downgrade the high-quality ship components, you can easily reduce the upkeep to just 2 or 3 billion hex credits."

Gloriana grimaced. "That's not acceptable. We need the best that we can get. Settling for a smaller and cheaper capital ship will only limit our growth in the future. Since we have the opportunity to obtain a higher-end factory ship with excellent production lines from the start, we should embrace what we have and look towards taking advantage of her strengths."

Ves thought for a moment before he nodded in agreement. "You're right. Starting off big isn't necessarily bad. The costs are higher, but I'm confident in our money-making potential. It is a waste to make budget mechs with our GAIA production lines. Their capabilities are so good that they are best used to make premier mechs. As long as we design a good second-class mech that is comparable to the Valkyrie Avenger and Valkyrie Brunhild, we can reach a very high profit margin. This way, we only have to produce a couple of hundred mechs and sell them all in order to cover the annual upkeep of not just our factory ship, but also the rest of our fleet!"

"That's a tall order, sir. You plan to add several more capital ships to your fleet, correct? That will add many more billions of hex credits in expenses. The only consolation that I can give you is that fleet carriers and other ship types are not as energy-intensive as a factor ship. However, if these vessels sustain any damage, the repair costs can easily skyrocket."

The burden on the Larkinson Clan grew heavier and heavier. Although Ves knew it wasn't cheap to run a large fleet centered around several capital ships, now that he heard some solid numbers, he started to entertain some doubts.

It would have been a lot cheaper to settle on a planet and develop a colony! It was no wonder that so many organizations wished to build up a foundation on solid ground. Pursuing life in space was simply too expensive and out of reach to most people!

Not even mech designers thought it was worth it to squander most of their money on a large fleet. That was enough to make Ves realize that he was pursuing a very unorthodox growth path.

If his grand expedition failed, then much of this effort and investment would come to naught!

As he continued to muse about the finances of his expeditionary fleet, they finally reached one of the workshops.

The two mech designers needed no explanation from Captain Vraken. They knew much more about all of the exquisite production machines.

Ves approached the largest device in the workshop and placed his hand on its cold metal exterior. "I could only dream of owning a top Hexer 3D printer in the past. Only the best Hexer mech designers make use of a model of this caliber."

The ELKINE 69 may not be the top 3D printer model developed by the Hexadric Hegemony, but it was not too far away!

With such an excellent 3D printer, Ves probably wouldn't have to upgrade to a better model until at least several mech generations had gone by or if he reached the rank of Master.

"What a great machine. It's nearly perfect." Gloriana sighed as she admired the impressive hardware.

Different from the GAIA A-35, the ELKINE 69 was at least ten times more difficult to operate.

This was mainly because it demanded a lot more manual control over all of its production processes. The GAIA automated a lot of steps to make it easier for a normal production crew to operate it, but that came at the cost of looser tolerances and inconsistent output.

The ELKINE 69 took the opposite approach. Its developer designed it with the assumption that its operator knew exactly what to do at every step of the way. As long as the mech designer or fabricator was skilled enough, the ELKINE 69 could produce masterwork-quality mech components without relying on any extraordinary mental states!

"Hehehe..." Gloriana greedily stroked her palm across the solid metal exterior. "The ELKINE series is renowned as the most precise line of 3D printers in my home state. I can finally begin to fabricate vessels that are much closer to perfection than before!"

The ELKINE 69 was not fast, efficient, cheap or easy to operate. Aside from these downsides, its sensitive sub-components required very frequent maintenance.

In fact, its manual stated that it was best to service and recalibrate much of its internals after just a single fabrication run!

This was an extremely high burden that Ves did not look forward to. Aside from fabricating first production copies, custom mechs and expert mechs, it was hardly worth it to use it for other purposes!

Yet for all of these hefty tradeoffs, the ELKINE 69 offered enough benefits to make Ves and Gloriana happy.

Aside from being able to handle a lot of high-end materials and produce an even greater variety of special components, the couple mainly valued the model's precision and quality control.

The reason why Gloriana was so happy with the ELKINE was because it was easier to make masterwork mechs with it! She was already looking forward to completing the current round of mech design projects so that she could utilize her brand-new 3D printer to make six more attempts!

While the frequent need to service and recalibrate the ELKINE 69 was annoying, the factory ship had two of these precision machines!

In time, the two ELKINE 69's would probably diverge from each other as Ves and Gloriana personalized the machines. While these top-end 3D printers were far too advanced for the pair to make extensive changes, it was only a matter of time before the pair acquired enough knowledge to customize their mechanisms.

The same went for the rest of the artisanal production machines in the workshops. The high-quality equipment would never allow the two mech designers to exert their greatest strength when their settings and configurations didn't align with their personal style.

"It's too bad we only have two of these mech workshops." Ves muttered. "Juliet Stameros and any only future Journeymen will have to make due with the GAIA production lines or other places to fabricate their personal works. We should give them the opportunity to rent our workshops. There's no way we'll be making frequent use of these facilities."

Gloriana snorted and crossed her arms. "Let them pay for their own mech workshops! As far as I'm concerned, we worked for these facilities. If Juliet wants to obtain a comparable mech workshop, then let her save up until she is able to afford her own ship with a mech workshop that is up to standard."

"That's too harsh, honey."

"I'm not being harsh! I'm being fair!"

Chapter 2580: Power and FTL

With the GAIA production lines and the ELKINE-centered mech workshops, the HHX-6963 was arguably the best factory ship in the Komodo Star Sector!

"I hate to burst your bubble, Ves, but the Masters I know of can easily crush the HHX-6963 with their own means." Gloriana said. "Even Master Olson's Titanium Garden is able to output an insane amount of high-quality mechs a day if she so chooses."

Ves briefly slumped. "You're right. Compared to assets of actual Masters, our little factory ship is not that impressive. I'm certain we beat every Journeyman in this regard. I think even Seniors will have difficulty obtaining something just as good."

It was difficult to make direct comparisons because he didn't know that many mech companies or mech designers who operated a fully-fledged factory ship.

Many high-ranking mech designers were usually based in fixed locations just like Ves had been in the past. Unless a devastating conflict like the Sand War or the Komodo War threatened to sweep over their manufacturing complexes, it wasn't necessary to acquire a mobile production facility.

Most Journeymen and Seniors made do with modestly-sized mobile supply frigates. They just needed to have a single well-equipped mech workshop at their disposal in order to break up the monotony of lengthy space journeys.

At the very least, factory ships weren't needed in most portions of civilized space. Despite that, Ves went ahead with investing in one of them. His choice made a lot more sense if his expeditionary fleet reached the Red Ocean. The HHX-6963 would easily be able to pay for herself once she began to pump out mechs that could be sold for an inflated price!

"Well, let's wrap up this tour." Ves suggested. "The production halls and the mech workshops are the heart of this ship."

They continued to tour some other sections. For example, they paid a brief visit to the design labs. There were multiple of them this time. There was enough room for hundreds of assistant mech designers. In fact, Ves could even choose to modify the interior and cannibalize the surrounding compartments to host up to a thousand mech designers!

Of course, that was far too exaggerated. The factory ship was mainly a vessel oriented towards the production of mechs. It was much more appropriate to acquire a dedicated research vessel and move all design activities there. With exceptional lab equipment, specialized departments dedicated to other research fields, an AI core that was specialized in mech design rather than starship operation and ample prototype testing facilities, the LMC's Design Department should be able to design much higher quality mechs!

However, that was a matter for later. Ves wanted to acquire several other capital ship types first before he was ready to add a dedicated research vessel to his expeditionary fleet. For now, the design labs aboard the HHX-6963 were already good enough.

Captain Vraken continued to lead the group downwards. She briefly showed them around the 37th deck, which she informally called the secondary command deck.

The combat information center was almost just as impressive as the bridge. Aside from offering a commanding officer to direct the entire fleet in battle, it also offered a lot of sensor, targeting and coordination and other forms of support to mech pilots.

The grand captain briefly explained how useful it was to man these stations.

"When battles increase in scope, it becomes harder and harder to coordinate individual units. Even your mech commanders will find it difficult to utilize the mechs at their disposal to the fullest. Command centers like these can offer broad support to every unit or more selective support to a small quantity of mechs. In fact, this CIC is made to offer support to every single artillery mech that is stationed in one of this vessel's bunkers. This way, the mech pilot can focus on aiming and shooting while an operator can handle the bigger picture."

Ves could imagine how this would be useful. He knew mech pilots well enough that they were prone to tunnel vision. When they became overly-focused in battle, their situational awareness dropped.

While mech pilots received plenty of training to remedy this behavior, it was a lot easier if someone was there to take over this burden.

This was not a new idea. Pairing mech pilots with their own assistants frequently led to better results, but the requirements were quite burdensome. The mech needed to establish a direct and reliable communication channel to a command center. The connection also needed to be secure. If an enemy managed to hack the channel, then a lot of crucial data would fall into the wrong hands!

In any case, these problems were not concerning in the case of bunker mechs. Since the artillery mechs assigned to the bunkers were still aboard a ship, it was very easy to establish solid and secure communications lines from the bunkers and the command centers.

It was nearly impossible for external enemies to tap or break these lines!

"This is a useful function, but I think it's not as relevant to our current circumstances." Ves remarked.

"Oh? How so, Mr. Larkinson? Your mech pilots, though good, are still limited by their attention span."

"I'm not arguing that, but I think you'll find that the Transcendent Punisher model is already connected to an operator that is greater than you can imagine. There is hardly any need for a second assistant."

The tour continued onwards. The 38th deck housed a lot of the guts of the factory ship. The group had to board another lifter platform in order to travel all the way to the stern of the vessel.

They had to pass through another guarded checkpoint in order to enter a huge compartment.

"Welcome to the primary engineering bay." Captain Vraken led them to one of the four huge and powerful power reactors in the compartment. "The 38th deck houses 12 capital-grade power reactors in total, of which 4 are situated here. In addition, there are 4 additional secondary reactors located in the secondary engineering bay at the 17th deck. However, the latter are mainly backups and should only be activated when the ship needs to draw more power or if the primary reactors have failed."

While this was a bit convoluted, spreading around the power reactors ensured that no single attack or accident was able to disable the entire factory ship.

Decentralizing power generation also ensured that several different sections of the ship retained access to power even if power couldn't be transferred across the entire hull.

"These are hungry bastards." Ves frowned.

"Capital-grade power reactors generate much more energy than smaller models." Captain Vraken noted. "In fact, this specific model is optimized for maximum output in order to support the needs of a lot of power-hungry ship systems. They are ideal for supporting shield generators. The tradeoff is that this power reactor can only run on very high-quality reactor fuel that is not that easy to obtain."

"What happens if we run out of this specific type of reactor fuel?" Gloriana curiously asked.

"It is unlikely that we will be dead in the water. There are secondary and even tertiary power reactors that are much less picky. While these backup power generators aren't powerful enough to run the HHX-6963 normally, they are enough to keep us alive while tentatively enabling both sub-light travel and FTL travel."

"Basically, if we ever end up with a mostly-empty tank, we can still limp our way to safety." Ves summed up the explanation.

"We can also siphon power from other starships or transplant their power reactors if necessary. In fact, if you have enough resources at hand, you might even be able to make some less demanding power reactors yourself."

There were many possible solutions to solve this problem. They just had to be creative and resourceful enough.

Of course, the best solution of all was to never end up in this situation in the first place.

"How much reactor fuel can we stock up on?" Ves asked.

"A lot." The captain answered. "One of the advantages of the type of reactor fuel that these primary reactors consume is that it is very dense in energy. A standard container filled with this substance is enough to support a capital-grade power reactor for months.

I suggest you take the opportunity to stock up on several years worth of reactor fuel along the way to the first beyonder gate."

"Why didn't anyone tell me that? Let's place an order right away then. Our clan has plenty of money now that one of our latest products has gone viral."

Daria-Maria shook her head. "Don't be too hasty. Let us travel past a few more star sectors before we shop for fuel. Right now, the Komodo War has vastly increased the regional consumption of many categories of reactor fuels. Even the prices in Vicious Mountain and Majestic Teal have risen. You can save up to 50 percent of your money if you stock up on reactor fuel in a peaceful star sector."

"Oh. Okay, we'll do that then. I don't want to waste billions of hex credits when I still have a lot of expert mechs and capital ships on my shopping list."

After they inspected some of the power reactors, the captain showed them to the largest FTL drive that Ves had ever seen.

Although Ves was aware that the FTL drive of the Starlight Megalodon was even larger, he never got to see it in person.

This was different. A huge block of metal that was about the size of an office building loomed in front of him. It took an FTL drive of at least this size to enable superluminal travel for a 2 kilometer long capital ship!

Several chief engineers and other engineers were already crawling over it. They even opened some hatches in order to access the vast interior.

"Aside from the AI core, the three FTL drives installed on this vessel are the most technically advanced ship components we currency possess."

"That's a bold claim, captain." Ves looked impressed.

"Look at all of these highly-trained professionals." She waved her arms at the milling teams of engineers. "Even the ones dispatched by our state cannot claim to understand the entire operation of this drive. There are too many principles and applications of high technology that are simply beyond what any Hexer can understand. Not even your impressive ELKINEs are as advanced as a capital-grade FTL drive."

"That's also why they cost so much." Ves sighed.

Many capital ships made do with just a single FTL drive. While they were able to accommodate more, it cost hundreds of billions of hex credits to add an additional one. Aside from offering more speed and more guarantees against failure, the addition didn't actually make the huge vessels more productive.

Some people believed it was better to save up all of that money for a second capital ship instead.

However, as long as finances weren't too tight, it was still better to have at least a second FTL drive on hand. What Ves had done by adding a third one to the factory ship was very unusual!

Still, he believed it was worth it. He had forgone many other possible upgrades to acquire some extra assurance that his factory ship would never falter.

"There is not as much differentiation in FTL drive models. This one along with the other two are merely standard for 2-kilometer long capital ships." The captain highlighted. "While they are highly reliable, they don't excel in terms of range, cycling speed, reliability and longevity. Still, don't look down on them for these reasons. As long as your engineers take excellent care of them, they can easily last a century."

"It's a shame we couldn't add any of the long-range FTL drive models." Ves sighed.

"Our state needs them more than you. Besides, long-ranged variants are at least several times to ten times more expensive than standard models. They are mostly reserved for fleet carriers built for deep strike purposes."

This was another resource that states kept for themselves. They were so difficult and expensive to build that they never ended up in the hands of private clients.

"Well, I can always dream."