

### Chapter 681 Thought Exercise

"Forget about your duties and obligations for a moment. Just assume that the Swordmaidens are fine without you. Let's say that you are retiring from this piracy business in order to start your own mech business. What will your first design look like?"

The question threw Ketis off a loop. "I'd never abandon the Swordmaidens like that!"

"This is a hypothetical. A what-if situation. A thought exercise." When Ves noticed that Ketis didn't get the point, he took up a firmer tone. "Just play along damnit!"

"I.. I can't imagine such a future. I don't know what to do by myself."

"As a fully-qualified mech designer, there is always one thing you can do. You can start a mech business. That's the hypothetical we are playing with today. For simplicity's sake, let's assume you bought a fake passport and acquired a new identity in civilized space. You've become a citizen of the Reinald Republic and set up shop at Harkensen III amidst all the other mech workshops. As a hopeful new entrepreneur, you've got to show the mech industry that you're capable of standing on your own two feet. You spent your first years stabilizing your business by designing a couple of variants. They're successful enough to pay the bills, but you need more if you want to go further. Only an original design will do. What will it look like?"

The narration helped her get into the right mindset. She visualized such an imaginary dream, despite lacking sufficient understanding about how to conduct business in civilized space. She wasn't supposed to chop her sword at someone if they pissed her off, she recalled.

"I'd definitely design a swordsman mech. It's what I do. It's what I know."

"Is it also what you love?" Ves interjected.

She paused. "Yeah. I kind of do. It's the first mech type that I've really worked with, and it's the one I'm mostly in sync with as well. As a sword practitioner myself, I feel like I understand just how it's supposed to fit together. All the nuances about the layout, how the artificial musculature has to be like this or that to maximize the strength behind a sword swing, why you should pay a lot of attention on the feet so that the mech has stable footing, all of that knowledge shows that I know how to design a swordsman mech better than a bunch of nerds like you who never swung a real sword in their hands in their entire life!"

Ves briefly clapped. "That's a good argument! I'm fully convinced that you're able to design a great swordsman mech! Is it your mission to show so-called nerds like me who have never fought a real battle for their lives that you can do the swordsman mech type justice?"

"I.. I don't know. I never really thought about it. All I know is that I feel nothing about the other mech types I've worked with. Tinkering with light skirmishers or medium knights is barely tolerable to me. They're kind of like swordsman mechs who have fallen into the wrong path. It's the ranged mechs that really bother me. I can't design a rifleman mech. I simply can't. I hate them. I hate their entire concept."

That sounded curious to Ves. "Why do you hate the concept of ranged mechs? A rifleman mech is an indispensable part of the mech battlefield, whether it takes place on land, in the air or in space. I've seen you wield a pistol back on Mancroft Station, so I don't see why you object to mechs doing the same."

"That was a necessity. I only carry around my pistol because the Swordmaidens have learned too many times that there are plenty of cowards out there who will want to snipe us off at a distance."

"Don't you think the same applies to your swordsman mechs? Their lack of ranged armament makes them vulnerable to outfits that field mechs that excel at range. For example, the Caged that we let slip away for the second time. They'll be back for a third round, mark my words, and we better prepare our mech roster to counter their hit-and-run tactics."

"I just don't like working with mechs armed with guns, alright?!" Ketis shouted in an exasperated tone. "I'm not as wordy as you, teacher. I can't explain the way i feel the way I do."

"Let's go back to swordsman mechs then." Ves quickly shifted back to the main topic. "I've noticed you're very enthusiastic about them. This could be your calling, Ketis. Your aptitude along with your familiarity with both swordsman mechs and the people who tend to specialize in piloting them can be a real boon in your career. You possess advantages in this aspect that few can surpass. Does the notion of running your own business around swordsman mech sound like an attractive prospect to you?"

To Ves, the life experiences of Ketis might have been one-dimensional and heavily slanted towards swordsmanship and everything connected to it, but every cloud possessed a silver lining.

Her eccentricity in her heavy favoritism regarding swordsman mechs should be something that Ves should foster at any cost. There were worse pursuits a mech designer could specialize in, and he couldn't see any other way Ketis would want to put her heart and soul into for the rest of her career.

She finally gathered her thoughts into words. "I think I'd very much like that. It's still something I don't see happening, though. I love the Swordmaidens too much to abandon them. I've grown up with them for most of my life and I want to pay back everything that they've given me. From my sisters, I've learned how to become strong. From Mayra, I've learned how to design mechs. From the Swordmaidens, I've learned how to gain the respect I thought I had lost."

Ves understood that hypotheticals like this worked poorly on Ketis. She couldn't keep her mind divorced from the Swordmaidens. It was as if she feared she would be struck by a cosmic beam if she stopped thinking about her sisters for more than a dozen seconds!

Still, the brief mental exercise exposed her inner thoughts and feelings regarding her favorite type of mechs. Ves could work with what he uncovered.

"If you can't imagine a life without the Swordmaidens, then let's forget about the previous fantasy. Let's imagine you are with your sisters for your entire life and that it's five or so years in the future. Say that Mayra is getting on in her age and she contracted some kind of frontier injury or disease that has left her sick and infirm. She's in no shape to design a mech anymore! The last thing she commands you to do is to design a new swordsman mech that will replace the main mechs of the Swordmaidens. What will you design?"

Ketis had to wrap her head around the drastic changes in narrative. She furrowed her brows again and thought hard and deep. "I really hate it if something awful happens to Mayra. I hate you for putting that image in my mind."

"Don't use your accusations as an attempt to divert from this exercise. Something like this might very well happen in the distant future, so it's best you get your act together now rather than later. Put your mind back in that hypothetical future. Mayra has tasked you with designing a new mech, if only to prove that the Swordmaidens haven't lost their advantages in fielding their own internally developed designs. What is the mech you are going to design?"

"Does it have to be a spaceborn or landbound mech?"

"Let's limit this to landbound swordsman mechs for now. I've seen the Misty Slasher, and it's much more complex than you think. At the very least, designing something comparable to your internally developed spaceborn

swordsman mech design is out of the cards for you. I think a simple landbound swordsman mech is more relatable to your own training and experiences."

"If that's the case, then I'd design the best swordsman mech for the Swordmaidens as possible!"

"I'd be careful with using words like 'best'. Take your budget and your material limitations into account."

"Uh, right." She shook her head. "Okay, I'll design a itty bitty better landbound swordsman mech then. It's going to be shaped like a woman and have a really huge sword and it's gonna be plated in the strongest armor and it has legs for days that can run so fast it can catch up to light mechs in a sprint and it will have Mayra's minibooters attached to its frame that can give it an even greater boost and—"

"STOP!"

Ves held out his palm while nursing his forehead. "Take a few breaths and think of what you just said. What did you just describe?"

"My ideal swordsman mech."

Thud!

Ves slammed his palm against his desk. "No you idiot! I just told you to think, not to blurt out the first thing that comes from your mind. I'll give you a full minute to reflect on what you just listed out. I hope to hear something more sophisticated than what a five-year old kid might say."

The minute stretched on while an awkward silence fell over the office. Ves glanced at Ketis scrunching her nose while she worked her muscle-brained mind why Ves called her an idiot. Sometimes, he couldn't believe that Ketis was actually qualified to call herself a Novice Mech Designer.

"Okay. That's it. A minute has passed. What do you have to say for yourself?"

She looked a little contrite. "I described a mech that can't possibly exist. There's no way I can design a mech that's fast, strong, tough and is jacked up with boosters and still be within the means of the Swordmaidens to produce."

"I'm glad that common sense has returned to you. I know you haven't often used it, and that's fine. I've seen many mech designers who have forgotten about their common sense. But it's best to remind yourself to go stay grounded every once in a while. Now, a basic rule when designing mechs is that you can't let your fantasies run wild. You have to work with the resources within your means."

Ves elaborated about this point in a basic lecture. Because Ketis had never been fully responsible to manage a business, workshop or mech department of her own, she had no concept of working under these kinds of limitations. The worst enemies of a mech designer in the galactic rim was their limited budget! When they had a finite amount of money at their disposal, they could only obtain so much licenses or acquire so much production facilities.

One difference popped up between mech designers working under the auspices of the MTA and in the frontier. "Say, Ketis, how do you mech designers in the frontier handle licensing issues? Do you pay any licensing fees at all when you make use of someone else's mech or component designs?"

She looked at him as if he spoke an alien language. "Are you kidding? Who the hell wastes K-coins on licenses. They're just a stupid way you civilized people invented to make some extra money. I don't know a single mech designer in the frontier who has ever paid a fee on designs. Whenever we need one, we just crib one from each other or from the galactic net. If it's there, just take it and make use of it. Haha, paying for licensing. That's a funny story."

He couldn't expect anything better out of pirates. They thumbed their noses at the MTA, of course they would ignore the licensing system that had helped many mech designers in civilized space from profiting off their innovations. It was obvious that Ketis did not respect the sanctity of intellectual property as much as Ves or any other mech designer who grew up in civilized space.

"I see I need to fill up your knowledge gaps before we can proceed with more profound lessons." He said. He waved his hands, transferring some files to her comm. "Let's adjourn the lesson for today. Read these textbooks by tomorrow. I expect you to be able to answer my questions when I quiz on them tomorrow afternoon."

Ketis' eyes widened at her homework. "This is three whole textbooks! How am I going to read through all of them before tomorrow!?"

"That's the nature of studying. Don't whine. None of the books are about science. They're actually describing the particulars of running a mech business. A lot of the contents of the books are taken up by elaborate explanations and examples of fundamental business concepts. Just take a look and you'll see."

"AARRGH! TEACHER!"

### **Chapter 682 Delegation At Work**

It was the first day since the Flagrant Swordmaidens crossed over into the Faris Star Region.

"Fuel supply is topped off. Other supplies are ample. Crew morale is buoyed by the recent victory, but it is starting to look shaky due to the bombshell revelation of the Starlight Megalodon. Some of the starships have sustained armor damage which remains largely unpatched. Our mechs are as numerous as they can get and they are mostly in a decent condition. The relationship between the Vandals and the Swordmaidens is shallow but promising. The distance from civilized space is just a single hop away."

The status report he composed in his mind served as a marker to remind himself of the overall state of the Vandal fleet.

Ves left Ketis to sink her teeth in fundamental textbooks on microeconomics, marketing and management theory. He spun back on his chair and cast his mind on his own business activities.

Now that he addressed every urgent issue for the day, he could finally take a breather and take stock of his recent benefits and burdens.

Ves eyed the lockbox again. The sulomnium, beta-otricine and Flesha's Tears he secured formed the nucleus of his self-developed ultracompact battery, but he was a long way from fabricating them. He turned on his privacy screen before turning on his terminal. He loaded in the condensed documents enumerating some very complex and abstruse theory on how ultracompact batteries worked.

It was a far cry from a readily available design. A disconnect still existed between pure theory and a solid set of design specifications that Ves could upload into a 3D printer and have it fabricate the components on the spot.

"The Skull Architect hasn't made this easy for me. He took out way too many useful derivations that I could have used to cobble together a design without needing to bother with all the advanced theories."

Fortunately, Ves already possessed a broad body of knowledge, possessed Senior-level Physics to boot. Achieving true understanding of the research papers and extracts related to ultracompact batteries might have taken months and years for an average Apprentice Mech Designer, but Ves was confident he could master half of it within a week and understand the essence of it within a month.

After briefly skimming through the files on ultracompact batteries, he switched to the files containing similar documents but this time on stealth technology.



Despite containing relatively more reading material for him to study, the scope of stealth technology was much bigger. What Ves obtained from the Skull Architect represented just the tip of the iceberg.

In essence, he only obtained a bare summary of the relevant theories related to stealth tech. If Ves wanted to construct a working prototype that applied the principles explained in the documents, then Ves might not even be finished yet in five years! He needed to perform hundreds of experiments and compose several textbooks worth of research in order to obtain the necessary theoretical foundation and transform it into an applicable blueprint.

His existing knowledge helped accelerate the learning and development processes, but couldn't entirely substitute for missing data. Ves needed to painstakingly construct them from his own efforts.

"Luckily, I have another advantage that will severely shorten the time I need to master this tech."

The salvaged stealth shuttle fragments pretty much provided Ves with a key. The few portions of the shuttle left intact gave him a useful direction for his theories, allowing him to skip many experiments as the answers were already evident.

He basically possessed both the starting point and the end point of a finished research project. By taking advantage of both, figuring out the middle portion shouldn't be too difficult and not as nearly as time-consuming if the end point was still shrouded in fog.

"It's still going to be a multi-month effort to decipher the secrets behind this particular application of stealth tech." He concluded. "I don't know how long the hunt for the Starlight Megalodon will take."

The time-consuming projects demanded too much of his time, and he wasn't sure if the mission lasted long enough for him to complete them. It would be

extremely inconvenient for him if he was transferred out of the Vandals halfway into his project on replicating stealth technology.

He hadn't forgotten about the minor rebuke he received from Major Verle. If the observation system perceived that Ves spent too little time on his core responsibilities, then that might have awful repercussions to his future within the Mech Corps.

Though his draft had been an obligation, it was also an opportunity! Those who worked hard and exploited the advantages given to them by the Mech Corps were able to lay down the groundwork for future prosperity after their military service had ended.

Right now, his posting as a temporary head designer was already sufficient to make every other mech designer employed by the Vandals jealous.

He had to do right by the Vandals, but he also believed in the arguments he put forth to the commanding officer. Many matters did not require his personal intervention anymore. As the top mech designer among this detachment of Vandals, his foresight was pretty great and he had already issued many instructions on how to handle various thorny problems.

Recently, none of his subordinates saw fit to bring any matters to his attention. The system of delegation that he instituted throughout the entire hierarchy under his influence benefited from a lot more autonomy than usual.

Supposedly, the autonomy granted to the chief technicians and lower ranking mech designers enabled them to make nuanced decisions that fit their specific circumstances best on their ship and workshop.

Theoretically, this should have led to higher productivity as top-down decision from someone so far removed from the workshop floor couldn't possibly be as well-thought out and appropriate for the specific problem at hand.

In truth, empowering the lower level workers left the middle managers with a lot of headaches. Ves received status reports from Mercator and Trozin frequently and they often complained how time consuming it was to put out fires started out by incompetent mech designers who vastly overestimated their abilities.

"Hmph." He grunted with satisfaction. "Looks like the system is working fine to me."

With the lower level workers doing the grunt work and the middle managers acting as trouble-shooters trying to keep the system from collapsing, that left the upper management, which happened to be Ves, with very little to do. His main responsibilities at this stage encompassed supervising the organizational system he set up and to be available to solve any implacable problems.

He also needed to take some time to draft up new plans to account for future trends, but that was it, really. Ves could pretty much sleep or lazy about all day and nothing would go wrong.

The only way he could make a significant contribution up to this point was if he visited the workshop compartments in person and used his considerable personal design skills to upgrade the mechs to an artisanal quality level.

"That's a waste of my time."

Upgrading a mech to a ridiculous quality level only affected the overall strength of the Vandal mech force by a minute proportion. A drop in the bucket wouldn't fundamentally make the bucket any fuller, at least not to the naked eye.

Therefore, Ves actually couldn't really figure out what kind of work he should perform to prove to Major Verle that he was being a dutiful head designer.

He scratched his head. "I guess if delegating everything looks too lazy to the people who keep track of me, then I should do the opposite. Some good dose of micromanagement will give me enough busywork to make it seem like I'm actually working."

Ves could maybe do so on the Shield of Hispania, because he could just descend to the lower decks and order some people around while flinging his arms. However, there was only so much he could do on a single ship.

"Hmm, if I recall, the progress on modifying the landbound mechs to cope with extreme gravity is still beset by complications and delays. Those seem like good issues for me to intervene."

Because the fleet was travelling in FTL, Ves only had access to the maintenance department on the Shield of Hispania. He retrieved the current list of ongoing projects on their flagship. Because the Shield mainly carried spaceborn mechs, she only carried a handful of landbound mechs besides their fixed allocation of Akkara mechs.

Ves recalled that he initially transferred some of the most complex landbound mechs to the Shield. He did this in the likelihood that modifying these mechs would prove to be a difficult challenge. The latest status reports he called up showed the depth of this problem.

"Oh yeah, this definitely needs my intervention."

Though normally Ves would have liked the autonomous work groups to figure out their own solutions, Ves forestalled this process when he abruptly butted in and started tweaking the design of an existing mech.

"Hmmm.. this is actually pretty solid work. Ketis could learn a thing or two from the mech designer who came up with this elegant solution. Too bad this mech designer is only good at a couple of things. Engine performance will drop by

up to ninety-two percent if the mech is subjected to five g's of constant gravity!  
That's ridiculous!"

Such a fault would have been caught in simulations or training exercises eventually, but Ves didn't want to risk an oversight. A problem of this nature had to be nipped in the bud immediately.

"It's disappointing that my deputies haven't caught this problem. Are they blind or just that stupid?" Ves cursed his subordinates yet again.

Perhaps what he thought of as pretend work to make it seem like was busy might not be needed after all. If a giant oversight like this hadn't been noticed yet after a couple of weeks since they first entered the design logs, then maybe this phenomenon was more prevalent than he thought!

He spent an entire afternoon on correcting the design and improving the stability of some of its lackluster sections.

At the end of the day, he waved away the revised design, causing it to automatically update in the ship's database. Chief Haine down at the workshop should receive an awfully welcome surprise come the next shift.

This incident illuminated Ves on a severe deficiency in the current allocation of mech designers among the different ships.

"Every mech designer has their own specialties and development track. Even the relatively more rounded mech designers possess certain biases towards one type of mech over the other."

Perhaps one mech designer worked great with landbound mechs, but turned into an absolute wreck if he was forced to work on spaceborn mechs.

Ves himself suffered from the same problem but to a much lesser degree. He published multiple landbound mech designs, so he wasn't afraid of anything when it came to that area. Spaceborn mechs on the other hand was still new

ground to him, and he felt much less confident in his ability to design a spaceborn mech with a modern flight system from scratch.

"Then there's mech designers like Ketis."

The Swordmaiden mech designer currently scrunched behind her desk trying to make sense of her microeconomics textbook possessed an extremely focused bias towards swordsman mechs. Her design versatility was so poor it might as well be nonexistent!

"If someone like Ketis is put in charge of a workshop aboard a Swordmaiden carrier, then she'll do okay. It will be different if she's put in charge of mechs aboard a Vandal carrier. She won't be able to manage the diverse mech types with any degree of competence!"

No wonder his deputy designers had to work to the bone lately. Right now, Ves even felt sorry for Mercator and Trozin.

"Damn. Why didn't I take note of this trend before?!"

Certainly, his deputies should have taken note of this development and bring it to his attention. Did they suspect but refrain from voicing their suspicions? "Or maybe they've gone so far deep into solving the smaller problems that they've lost perspective of the big ones?"

As far as he knew, the allocation of mech designers had always been done this way. A single low-ranking mech designer might be stationed on a single ship for years, performing the same work over and over again like some bot.

"I suppose if there are attentive supervisors on the job, the problems won't become too serious. But if I want to free up time for myself, I should shake this entire structure up!"

## Chapter 683 Instant Dinner

The older structure worked when the entire Vandal mech regiment moved in a single fleet. Lower-ranked mech designers could turn to plenty of Apprentices or Journeymen for assistance.

It worked best with better-funded mech regiments. Unlike the Vandals, the other mech regiments employed an ample amount of mech designers. With up to a hundred higher-ranked Apprentices and up to twenty Journeymen employed at a time, a mech regiment did not lack for design muscle.

Even if most of them would spend their time on tinkering with actively developed mech designs, that much mech designers may still be useful even as tech support from a distance.

Besides, Ves bet that the other mech regiments also employed a lot more lower-ranking mech designers as well. Perhaps ten or twelve of them might be assigned to each combat carrier. If they were allocated in a clever manner, their diverse specialties enabled their team to cover a wide spectrum of possible problems.

"Something like this simply isn't possible with the Vandals. We don't have enough mech designers."

Every combat carrier in the Vandal fleet hosted a handful of lower-ranking mech designers. They were barely competent enough to propose and apply some rudimentary modifications. The real work needed to be done by Apprentices who were actually competent, of which the Vandals barely had enough to go around.

With only one high-ranking mech designer stationed aboard most ships, this meant that the variability of mechs between each ship would only diverge over time.

Perhaps one ship hosted a mech designer who knew how to work a flight system like magic. However, he was bad at everything else. The mechs aboard that combat carrier would therefore degrade in performance over time as that mech designer made a mess out of things. The only part about the mechs that didn't suffer a slide in performance was the flight system, which performed significantly better after he had a hand in their improvement.

Ves drew up an entirely new allocation scheme for his subordinates. His solution was simple. The mech designers needed to rotate to different ships every once in a while.

"The low-ranking mech designers can stay. Their adaptability is much more limited. They won't be able to adjust to their new working conditions so easily. Keeping them there will also enable some portion of continuity among mech designers to persist aboard each ship. Replacing one batch of mech designers with an entirely new batch of strangers will lead to too much wasted time in getting them all up to speed."

By rotating the higher-ranked Apprentice Mech Designers, Ves ensured that everyone's specialties would proliferate among the entire fleet.

For example, that expert in flight systems already finished his work on upgrading the flight systems of the mechs aboard his current posting. One day later, that mech designer transfers over to another ship.

She immediately came face-to-face with a different set of mechs with upgraded armor and an improved internal structure. The previous mech designer obviously emphasized their durability, but the ripple effects of his changes affected many other parameters as well, mostly in a negative direction. The entire flight system of these heavier-protected mechs strained to keep them moving agilely in space.



The flight system needed an entire overhaul to keep up with the changes to the rest of the mech, and that recently transferred mech designer came at the right time.

"Moving around the mech designers with different expertises and specialties will prevent the mechs from transforming into one-dimensional variants that is only good at one thing but bad at others."

The fundamental problem at work here was that most mech designers employed by the Vandals didn't possess the foundation or experience to design a mech by themselves. They spent so much time in design teams or collaborative projects that they neglected to shore up their complete ineptness towards certain areas of mech design.

"Every independent mech designer has to be an all-rounder to a degree. Their weakest link can literally drag down their career through the mud."

This was also why collaborative projects became the norm when it came to mech models with higher sales volume. The mech manufacturer that sold the mechs had to guarantee that they could fight and win, and to do so they needed to employ additional mech designers to cover the blind spots of their lead designers.

As Ves only possessed real experience with designing mechs by himself, he looked down on this dependence on others to cover for your weak points. He understood the logic and the merits of these methods, but he figured that the lead designers could easily become complacent about the gaps in his design skills.

A mech designer that became complacent was a mech designer that stopped advancing to a higher rank.

"All these mech designers have gone off the beaten path." Ves shook his head.

His disapproval aside, his fellow colleagues needed to eat too. Starting their own businesses may be a step too far for them, and Ves would have probably failed as well in his own attempt if not for the gift that changed his entire life.

Ves drew up a chart that listed out the available higher-ranked Apprentices at his disposal. He attached their names to their current berths, then shifted them around.

"Hmm, that's too simple. There are some cases where mech designers with similar specialties are visiting the same carrier."

He shuffled the allocation around and developed it into an increasingly more detailed periodic transfer schedule. After at least seven different transfers, each vessel received a mech designer that covered all of the major specialties that their mechs could benefit from. Not a single blind spot in their designs would remain if everything worked as planned.

After finishing this transfer schedule, he wrapped it up into a proposal where he explained the reasons why he thought was necessary to implement. Once he prettied up the words, he sent it on to Major Verle for him to decide whether to go through with it or not. This decision was way too big for Ves to unilaterally decide upon.

Ves smiled and leaned back in his chair. "Now that I've done my work for the shift, the rest of the day is mine."

Right now, the standard time reached the evening hours. The next shift came into force, freeing Ves and Ketis from their duties. Ketis pretty much ran out of the hatch of the office compartment as soon as possible, ostensibly to eat dinner, but really to escape her dreaded homework.

Ves shook her head at her eagerness to escape studying. "Mayra must have sat on her every time she tried to get Ketis to do her homework."

Many servicemen moved to the mess hall at this time. Ves decided to skip eating one of the mess hall's reconstituted meals this time.

"I'm way too short on time."

After some reluctance, Ves bent down and opened up the bottom drawer of his desk. He retrieved a nutrient pack he had stashed there some time ago in anticipation of this kind of event.

Ves looked at the nutrient pack with distaste. "Savoury chili flavor with chunks of imitation beef chunks."

Everyone in the galaxy learnt not to trust the flavor name by heart. Certainly, the nutrient packs tasted fairly similar to its description.. If they came off fresh from rollers of the biosynthesis plant.

Because nutrient packs tended to last for centuries, large organizations had a tendency to order an enormous batch of them from a massive trans-galactic enterprise to take maximum advantage of any bulk order discounts.

The newly-ordered batch was meant to be used up over a period of decades according to the bean counters who came up with these cost-saving deals.

Ves flipped the flat, rectangular package of the nutrient pack over and looked at its synthesis date. "Damn, it's over two decades old. It's gonna taste like dry sawwood at this stage."

With a grimace on his face, he tore open the package of the nutrient pack, revealing its extremely dry contents. Compacted biological nutrients and other weird substances formed a highly-dense bar of pure industrial food as black as coal.

He took a single bite and chewed with great difficulty. "Yeap. Dry sawwood."

He couldn't even taste a hint of chili, let alone the promised imitation beef.

Due to the extreme dryness of its contents, a nutrient pack should never be eaten without a readily available source of hydration. Plenty of starving people had actually died of thirst after frantically eating a nutrient pack without pausing to drink some water!

Water was always at hand, fortunately. Ves picked up an empty cup and held it in the air. A spout from the ceiling deck squirted some water into the cut. Hidden antigrav modules caused it to fall gently into the cup, preventing the liquid from splashing around.

"The things I do to survive." He sighed as he took a quick sip of water before finishing his nutrient pack within minutes.

The meal might not be very appetizing, but the entire routine didn't take up more than a couple of minutes.

"Let's get back to work now."

Many mech designers that wanted to exceed their quotas worked extra hours or entire double shifts in order to deliver an excellent performance for the week. Back when Ves first introduced the rewards they could gain for exceeding their weekly quotas, some had been very enthusiastic about pursuing these goodies.

"It's too bad that it's lost a lot of force by now."

Even the slower-witted among the mech designers found out that borrowing too many textbooks didn't help them out at all. They needed months to peruse and study a single profound book, so what use was there to juggle six of them at once?

Ves scratched his head. Motivating his subordinate mech designers to work overtime was harder than he thought. He needed to figure out a new reward to keep the chumps working like bots that didn't know how to rest.

"I'll figure something out another time."

Right now, with time pressing on his mind, Ves still had his side projects on his plate. "Right. At this moment, piecing together a working ultracompact battery is my highest priority."

Once he replicated a tiny battery the size of his tongue that compressed enough energy to fly an aircar from one continent to another, his ability to protect himself increased by a massive amount.

"A supercharged jamming device can act as a substitute for a stealth device, able to fry or blind even the most shielded electronics when put on maximum power. Such a gadget will help me remain discreet when discussing sensitive matters with other people. A supercharged stealth detector on the other hand will screw over those sneaky bastards from half a ship away with a single high-powered pulse."

He suddenly realized he neglected a crucial factor into the working of such supercharged devices. "My gadgets will fry and melt if too much power is pumped into them in a short interval. It would be like pouring a lake's worth of water through a fragile pipe made out of wood or something."

The pipe would burst instantly, splashing a humongous amount of water over anyone in the vicinity.

If Ves wanted to make full use of the ultracompact batteries, then he needed to go back to the drawing board and comprehensively strengthen the design of his existing gadgets.

More work on his plate. Oh joy.

He spent the rest of the evening making a start on this project. He dove into the fragmented documentation that explained the science that underpinned their workings and understood perhaps five percent of the necessary information necessary to fabricate a working version of the batteries.

"This isn't going to be easy." Ves frowned deeper. Still, he needed to persevere. He always expected this effort to be a slog.

As evening turned into night according to the standard time, Ves rubbed his eyes and swiped away the projection explaining one of the many complex theories that he needed to master.

This was too much! His brain was already starting to pound. It signified that some of the theories involved higher concepts that Ves shouldn't be exposed to. This was far harder than he thought!

"The Skull Architect lied to me! This knowledge is filled with traps!"

#### **Chapter 684 Creation vs Replication**

The files on ultracompact batteries had not come in the pure and neutral form as he had hoped. The core part of the virtual documents consisted of slightly outdated but exceedingly complex research papers written by experts and to be read by their peers.

The difference between a textbook and a research paper was profound. The former sought to elevate the understanding of their readers in a particular field, while a research paper published cutting-edge research results that pushed the envelopes of that field.

Certainly, Ves was no stranger to research papers. He read a whole bunch of them back in school, but they usually consisted of classic seminal publications that exerted a historic influence on the development of mech design. His teachers carefully selected the least profound among the papers to bestow to their students, and sometimes even went the extra mile and censored the higher-level concepts that would have broken the prospective young mech designers.

Ves enjoyed no such coddling now. These papers, at least a decade or two old, should have been read by researchers with at least five decades of experience in the field of electrical engineering and the like.

While Ves himself upgraded his Electrical Engineering Skill to Journeyman-level himself, that was far from adequate to decipher the papers written by researchers who dedicated their entire scientific career in advancing the capabilities of capacitors, batteries and energy cells.

The writing style of research papers reflected their dedication and mastery of the field. The dense paragraphs was filled with jargon, resulting in content that contained an extremely high information density.

An average fictional novel was like a feather. Their authors aimed to provide their readers with a pleasurable and comfortable reading experience.

A textbook was like a blanket. Their authors and editors gently eased those new to the contents into the fold.

A research paper was like a brick. The scientists who wrote them simply couldn't be bothered with the long-winded process of using a feather or a blanket to educate their fellow peers. They instead used the bluntest object they could find and smack them against each other's faces.

Those with a big head could take the blows without sustaining any damage and dish them right back with the same amount of strength.

Unfortunately, the people who lacked the smarts and theoretical background to understand the brick would just get their teeth smacked out. Many even sustained worse injuries.

This was the reason why he called these research papers a trap. The Skull Architect meant to torment him with knowledge that was in his grasp yet locked behind a metaphorical mob of angry researchers armed with bricks!

"It's an insidious trap, alright." He muttered with a glowering expression. "He's testing me again."

The Skull Architect had taken some of his measures, and bequeathed him with a test that corresponded to the man's expectations of Ves. It was patently ridiculous because even a Journeyman Mech Designer would get lost in these research papers!

"In the end, I showed off too much of my capabilities. He probably mistook me for a fast learner."

Ves could handle the jargon. He could handle the dense and packed academic writing. What he might not be able to handle was the mental contamination inherent in the papers.

"If mech designers crystallize the essence of their customs, principles, aspirations and biases into their design philosophy, then scientists and researchers have adopted something similar called their research philosophy."

The rules and dangers concerning design philosophy were much more severe than those related to research philosophy. However, even if research philosophy ended up a little milder, it could still be lethal to an immature and undeveloped mind if exposed at full blast.

Ves found to his dismay that even with the advantages of his heightened Intelligence, Concentration and Spirituality Attributes, he still sensed he was subject to mental contamination from the research philosophies buried deep within the contents of the papers.

They were like whispers in the back of his mind. They tempted him to leave mechs aside and devote more research into developing better batteries.

They urged him to side with the different camps that bitterly divided the researchers. One camp advocated that the best batteries were those with the



absolute highest capacities. Every other concern could be shoved aside as long as the batteries lasted forever.

Another camp favored maximum energy transmission. They wanted to make batteries and capacitors be able to load and dump as much energy as safe and practical as possible. Maximum capacity could take a backseat in their eyes.

Doctrinal and ideological conflicts divided every field of science. If a theory existed, there were tons of advocates and detractors arguing in favor or against its merits.

Casually stepping in the middle of this debate without any expectation of taking a side was like navigating through a minefield. No matter where he stepped, he would eventually get his by a blast.

In short, Ves estimated that he needed to expend a substantial portion of his mental energy merely to digest a tiny fraction of the knowledge hidden within the research papers.

It required hard work, extreme concentration and a willingness to torture his mentality to get anything useful out of the academic literature.

"At the very least there's a great benefit to be gained at the end."

What Ves obtained were the keys to acquiring a shallow but undeniably broad theoretical foundation into the field of energy storage.

The versatility of mastering such knowledge far surpassed the act of learning a ready-to-fabricate ultracompact battery blueprint!

Mastering the theory allowed him to design any battery according to his precise set of demands and limitations. He could design a cheap ultracompact battery that barely did the job when he was facing many restrictions, which aptly described his current situation. He could upgrade to better battery later

on when he returned home and had access to the full resources of his mech company.

Mastering a single blueprint only allowed him to fabricate a single battery without even truly understanding how it worked or if he made a mistake somewhere. It also didn't take into account his context. For example, he could only cry if the design schematics demanded the use of an exotic that was only available on the other side of the galaxy!

"The difference between creation and replication is vast. If there's a viable choice, I would always choose the former over the latter!"

The tech underpinning ultracompact batteries possessed broad applications. Learning how to design a tiny ultracompact battery meant for man-portable equipment was no different from learning how to design the same battery but scaled for mechs.

Of course, such a battery would be prohibitively expensive and wildly inappropriate for commercial mechs in the galactic rim. Ultracompact batteries were rare in the Komodo Star Sector for a good reason.

"Well, it's not like I have to pull all the stops and design the absolute best batteries and energy cells for my mechs."

Even an energy cell that applied ten percent of the theories he mastered from the research material might be enough to boost its energy density by a significant proportion!

Overcome with the potential for greatness locked within the research papers, Ves began to cackle uncontrollably. "Kukuku.. Hahahahaha!  
HAHAHAHAHAHA!"

!

"Not good!"

He abruptly stopped once he realized how stupid he must have looked. The mental contamination from reading the research papers already started to get their hooks into his mind!

Ves violently shook his head, trying to clear away his current thoughts. "I have to be more vigilant about this matter! Riches and rewards are intertwined with risk and danger. I won't be able to obtain these goodies so easily without paying a price."

He put the research materials aside for another day. Right now, he didn't trust himself to fend off the encroaching mental contamination if he continued his studies.

"I should only study the materials in short bursts of time. I have to bleed off the mental contamination over time."

He decided to turn in for the night, as sleep always worked great in cleansing the mind.

The next day, he fell into a new routine. He received a message from Major Verle about his proposal.

Surprisingly, the mech officer rejected it straight out of hand without any opportunity for Ves to argue for his case.

"Why?" Ves asked, befuddled and a little angry for his idea to be shot down like that.

The brief message stated that Verle found the arguments plausible, but other concerns prevented him from taking it into consideration.

Right now, the highest priority of the Vandals was to maintain the highest state of information security! Shuffling mech designers around every once in a while severely increased the difficulty of keeping a lid on their secrets! The fleet already minimized inter-ship shuttle traffic to an absolute minimum. The

more stuff flew in space, the higher the odds of someone discreetly left behind some breadcrumbs.

Another reason why Major Verle rejected the scheme was that both the mech designers and the crew faced too much disruption if they had to become accustomed to new faces. It was especially harsh for the mech designers to leave behind their comrades and acquaintances they befriended over the course of their posting.

One particular line in the message stood out to Ves.

[As we go deeper into the abyss of the frontier, our men and women need anchors to keep them grounded and content. Do not belittle the strength that can be gained from knowing your comrades have your back. Fleet-wide morale is expected to deteriorate over time. Let us not hasten its descent by disrupting the familiar.]

In other words, Ves basically had to suck it up and figure out another solution to the long-term bias problem affecting the mechs aboard different carriers.

"Well, I guess it's back to the status quo."

With most of the quantum entanglement nodes down and inter-ship communication restricted to essential movement orders to keep the fleet together, Ves had no way of transferring the specialties of one mech designer to another ship that desperately needed them. In fact, the only solution that he could think of that might work was to take over the job of his deputies and rotate among the different carriers in person!

"So much for delegation."

Visiting the different carriers in person to wipe the butts of his incompetent mech designers consumed way too much of his time. How would he have any time left to spend on his side projects if he spent most of his nights aboard other starships?

Therefore, after a long moment's thought, he turned to the next best thing. He would personally comb over the designs of all five-hundred mechs from the comfort of his desk. After casually fixing up the most egregious faults, he would attach his corrected design to the delayed data burst the Shield of Hispania sent out to her sister ships at a fixed interval.

"It won't be possible for me to have a conversation with the mech designers who designed such atrocities." He furrowed his brows. "If I don't hammer in the point of how stupid they are, they might not even accept my suggested corrections."

Mech designers were confident of their own designs to a fault. Many took criticism of their work badly, and to see Ves run all over their baby like it was a piece of trash affronted them emotionally like nothing else.

Whenever someone gently provided constructive criticism to their work, they instantly turned into raging mothers who believed their sweet little child could do no wrong. Never mind the kids were actually devils who wrecked the family's aircar.

Ves sighed. "They'll just have to deal with it if they know what's good for them. The current state of our mechs has a lot of room for improvement."

Managing over five-hundred mechs was hard work. The fundamental problem behind their difficulties was that the Vandals simply lacked too many mech designers. The Verle Task Force had always been muddling along for the last half year or so. However, the cracks that slowly built up only started becoming visible now that the issue grew into a major problem.

He was already taking notes of this situation. If he ever became in charge of an independent unit, he would be sure not to repeat the mistakes he witnessed here.

## Chapter 685 Cultural Differences

The Flagrant Swordmaiden fleet emerged out of FTL at the edge of a barren star system. Even before the sensors of their starships resolved their way out of the confusion that followed every transition process, squads of mechs emerged from the combat carriers. They formed into pre-arranged patrols and revolved around the combined fleet in a widening orbit in preparation to meet any threat.

No threats surfaced against the newcomers. The patrol mechs encountered no space mines, no old debris from past space battles, no ambush from a prepared pirate fleet, no storm of sand that served as the prelude of a massive sandmen assault.

By all accounts, the uninhabited star system was devoid of any threats. To be certain, the Inheritor mechs upgraded with the stealth detecting sensor array performed a grid search of the nearby space in the vicinity of the fleet.

"Stand down from action stations!"

Everyone sighed in relief. Safety was not guaranteed in the frontier like it was in civilized space.

Back when Ves served aboard the Ark Horizon for House Kaine, the massive expeditionary fleet practically brute-forced their way to the Groening System. Lord Jeremiah Kaine put so much faith in the strength of his extravagantly equipped fleet that no one could imagine its downfall!

Yet fall it did, and in the most dishonorable way at that. The expeditionary fleet strenuously beat off a major sandmen attack, only to be ambushed by the Dragons of the Void before they could recuperate and replenish their forces!

The pirates were genius for springing their ambush at the weakest point of the expeditionary fleet's mech forces. The proud second-class mechs from the Constance Grand Kingdom that outperformed any pirate trash couldn't put up

much of a resistance with their tired mech pilots, their dented and damaged frames and empty energy cells.

A major spaceborn mech force fielding mechs worth the equivalent of at least 500 million bright credits met an ignoble end at that follow-up battle! All notions of fairness had been thrown out the window as Kaine's household troops as a fresh and numerically superior force of pirate mechs overwhelmed them in an instant!

Much of those pirate mechs didn't cost more than the equivalent of 20 to 30 million bright credits! A significant proportion of their thralls probably piloted absolute crap mechs worth only half as much or less.

Ves learned a valuable lesson from this experience. "The frontier never plays fair!"

The nature of combat afforded very little margin for error to those who commanded over mech forces. The stakes were raised in the frontier because there was practically no safe harbor for losers to run to when they lost a battle.

Therefore, both the Vandals and the Swordmaidens never let down their guard. No matter how quaint and quiet the star system appeared, they launched at least a third of their spaceborn mech contingent at all times in order to patrol the perimeter around their vulnerable starships as they cycled their FTL drives.

Ves understood where the serious intensity and violent tendencies of the Swordmaidens came from. Roaming the untamed stars like vagabonds, living in fear of bumping into anything that surpassed them in might, such a life never allowed them to rest and put down their worries.

"No wonder the people from the frontier act like they are one step away from lashing out in violence."

It was no way to live a stable life, yet it served as their means of survival.

A shift in mentality occurred when the two forces started to sort themselves out.

Now that they formally entered the space beyond the rule or protection of human authority, the Flagrant Vandals stopped taking the lead. Oh, they were still the more powerful of the two, but as the example with House Kaine's expeditionary fleet had shown, brute force rarely won out in the frontier.

In fact, the stronger the force, the more they radiated energy. If some dormant sandmen detected the ample amount of emissions escaping from their ships and mechs, they would surely send out a hunting fleet of sentient sand to suck away all of the juice.

This time, the Flagrant Vandals had to depend on Lydia's Swordmaidens to survive the many perils of the frontier.

All of this didn't concern Ves, however. He was still trying to manage the whole mess on correcting the flawed and uneven modifications to the mechs in the Vandal roster. There were over five-hundred mechs, and tackling all of their problems consumed a significant amount of his time even if he sped up his design work and cut some corners.

In his free time, he threw himself into studying both the poisonous research papers related to ultracompact batteries. He also spent some time down at the workshop to make sense of the stealth shuttle fragments with the Chief Engineer, though admittedly he hadn't been able to spend as much time as he ought to on this project.

It all came down to lack of time!

On top of spending his time on his core duties and his side projects, he also became preoccupied with shaping Ketis into the mold he made for her. Unlike a mech design, Ketis was a living being, so he needed to be very delicate with how he eased her into the mold.



"Teacher," Ketis spoke as she looked up with tired eyes from her latest textbook on business strategy. "I've had enough. There's no point for me to read all of these books on how to run a business! I'm never going to start my own mech company. Not every mech designer is like you, you know!"

Ves smirked and steepled his fingers together as he leaned in over his desk. "That's where you are wrong. No matter what job you do, everything is connected to scarcity. A virtual simulator allows you to play with an unlimited amount of resources. You can play with any design you want, and your imagination is the limit. That's not the case in realspace. Funding constraints, manpower constraints, technology constraints, demand constraints and more all apply whether you are starting your own business or work for someone else. Don't you think the Swordmaidens are the same? If you are to be put in charge of their mechs one day, you need to run your department like you run a business, at least partially."

"I don't get it." She shook her horned little head. "Okay, the book on microeconomics and accounting will help me budget stuff. I can see how that's useful in keeping managing the money. But these other books are a chore to read through! They just blather on and on about this and that about decisions that only senior managers in a big company ever gets to deal with! What does this have to do with mech design?!"

"I already told you the answer, Ketis. I don't like to repeat myself. For now, you can put the book down and come with me. We're going down the workshop compartment."

Her eyes glistened a bit. Compared to being forced to sit behind her desk studying books that might as well have been greek to her, getting her hands dirty with mechs sounded a lot more fun! She hopped to her feet and didn't forget to order her floating scabbard to float behind her back.

She bounced around with an abundance of energy as they made their way down the lower decks of the combat carrier. "What are we gonna do today?"

"You'll see."

They made their way down to the workshop compartment and walked past the busy mech technicians who perpetually needed to fix something. Ves nodded in approval at their diligence. Chief Haine ran a tight ship and she was definitely one of the better chief technicians he had met so far.

Ketis didn't take much notice of the mech technicians at all, despite their curious stares at her exotic form and her prominent exobeast pelt that she wore over her body. In fact, it was like they plainly didn't exist.

He stopped and turned. "What do you think about our mech technicians?"

"Huh? Uhm, they're fine."

"That statement has virtually no value to me. Describing something as 'fine' is meaningless. Let me ask you another question. What are the mech technicians in your outfit like?"

She sneered. "They're pathetic wastes of flesh. They're too weak to defend themselves or to fight on our behalf. We have to do everything for them, it seems. Lydia is too soft-hearted with the dregs she picks up. Sometimes those bumbling fools drop some vital component or makes a mistake when reassembling a mech, forcing Mayra to come down and fix the mess they made."

Ves couldn't believe what he just heard! The worst thing about it was that Ketis spoke her opinions on the Swordmaiden mech technicians in the middle of the workshop compartment with dozens of mech technicians manning the various machines or transferring parts and materials back and forth.

Work slowed down as the mech technicians collectively glowered at Ketis as if she just badmouthed their mothers.

"O-kay. The two of us need a talk, right now!"

He took a firm grip on her arm and insistently dragged her over to the nearest empty office compartment. He practically threw her inside before entering himself and locking the hatch. To make sure no mech technician was listening in, he activated his jamming device that was attached to his toolbelt. A low field that felt like static and mixed with rain enveloped the unused office.

"What was that about?" Ketis glared at him like he drowned his kitten or something. "I didn't do anything wrong! I just talked!"

"Don't you realize the gravity of what you just pulled off? With just a few sentences, you pissed off all of the mech technicians aboard our ship!"

"So what?" The defiance in her eyes never dimmed.

There was something very wrong about this whole matter. Ves couldn't believe she casually disregarded the mech technicians like that. It was as if their opinions didn't matter at all.

"Look, maybe it's a cultural difference between the two of us that's to blame." He surmised as he calmed down a little. "However, that hardly gives you leave to call the mech technicians weak, pathetic or incompetent."

"But that's what they are." She stared straight at his eyes as she spoke those words, looking like she spoke a self-evident truth. "I don't know why you're so caring about those leeches, but where I'm from, even bots are more useful than our mech technicians."

Ves sighed for the umpteenth time. How many times did Ketis confound him already? He had a feeling this wouldn't be the last time she would spring an unpleasant surprise in his face. The things he had to deal with at work.

"I would appreciate it if you keep your disparaging comments about mech technicians to yourself." He finally spoke. "Right now, you are a guest of the Flagrant Vandals, so you will need to become accustomed to our ways. One of them is that you don't piss off the workers who are responsible for doing most of the grunt work in servicing, repairing and maintaining our primary war machines."

"That.. sounds weird." She frowned. Though she was stubborn about a lot of things, she wasn't stupid. Not per se. Perhaps his own behavior finally managed to bore through her thick skull. "I really can't see how mech technicians deserve any respect. I just can't."

"Where does this come from? What is wrong with the mech technicians of the Swordmaidens, and why are you so contemptuous of them? You have to realize that in civilized space, the vast majority of outfits always take decent care of their mech technicians. Even if their importance ranks lower than mech technicians and mech designers, they are a valuable cog in the machine."

Ves couldn't recall any mech outfit that treated their mech technicians poorly. Something like that seemed self-evident.

"Huh. That does sound different from how we do things at the Swordmaidens." Like the uncouth frontier barbarian she was, Ketis dropped her bombshell without any fanfare. "When we're short on mech designers, we go raid some treasure hunters or something and take away their mech technicians. All of them are our slaves."

Slaves. And people said Lydia's Swordmaidens wasn't as bad as many of the other pirate gangs.

#### **Chapter 686 Processing Service**

Ves realized that Ketis spent most of her time in his office when she first boarded the Shield of Hispania. He hadn't taken her down the workshops and

the hangar bays even once. Due to that, her true opinion on mech technicians never had the chance to come up. Ves simply took for granted that the Swordmaidens ran their maintenance departments like every other outfit he had seen.

He should have known better. The frontier lived in primitive times. Humans living in the Faris Star Region devolved into simpler, brutal means of survival.

Whispers of slavery always surrounded the frontier. Ves didn't expect for it to hit closer to home.

Even Walter's Whalers, the presiding gang on Cloudy Curtain, didn't treat their mech technicians that badly!

"You know what's needed to protect yourself in the frontier?" She said with an indignant tone. She perceived his judgemental thoughts and felt challenged at his disapproving gaze. "Strength! The power to fight! Without strength, how can you defend yourself against the sandmen and the other scum that roam around the stars? The only people of value in the frontier are those who can stand up for themselves and fight."

"And those who can't? The mech designers? The mech technicians? The ship crew? Average people?"

Ketis sneered contemptuously at the mention of noncombatants. "Those who can fight reign over those who can't. The mech pilots rule at the top. The ones who can fight with a gun or sword in their hands are counted among the middle rung of the ladder. Those who can't fight but master rare and valued abilities such as being able to design a mech or command a ship sit right below the warriors. As for those with lesser ability or no ability at all, they're the dregs of the frontier."

"So let me get this right." He said, trying to parse through her words. "The mech pilots belong to the privileged class, the other warriors belong to the

fighting class, the mech designers and ship captains belong to the lower class, and the people of lesser skill comprise of the underclass?"

"That's what I said, though I never heard it put in that way."

"This is too extreme!"

Even in civilized space, plenty of people whose fighting abilities were bad earned an incredible amount of respect. From statesmen to business tycoons to scientists to artists and more, human society exhibited a broad spectrum of talent and skill that elevated them to the top.

However, according to Ketis, someone as respected as a medical doctor could barely be counted as a low-class laborer from the impoverished working-class city of Haston in Bentheim!

Instead, the ill-bred thugs and gang members that terrorized the streets and caused a lot of trouble ranked higher than these respected doctors and scientists, just because they could shoot a gun or throw a fist!

This was madness!

Ves voiced his thoughts. "How you pirates stay aloft when you treat your doctors, your technicians, your farmer, your miners and other essential vocations like dirt?"

"You think that because someone is good at something, they automatically deserve respect?" Ketis sneered at his naivete. "Teacher, without the ability to protect yourself and fight on behalf of yourself and your mates, all your smarts and abilities won't save you from a laser beam burning your precious brain to ash. Everything you build or obtain rests on the condition that you can defend your stuff! What is the use of becoming the best mech designer in the galaxy when any group of pirates can easily point his gun at you and force you to work for their outfit?"

He paused for a bit as he became affected by the sheer amount of conviction in her voice. She wasn't being wordy for a random reason. She truly believed in this spiel the frontier had ingrained into her from birth!

"...Is this why you keep up your sword practice so diligently? You value your status of being among the fighting class more than the wonders and mystery of working as a mech designer?"

"Mech designers are cowards who can't be bothered to fight their own battles." She summed up her true thoughts about her vocation in the bluntest fashion possible. "The only reason they aren't dumped with the other mech technicians in the so-called underclass you named is because the good ones help the privileged class of mech pilots fight better."

"And the rest? The lesser skilled mech designers? The mech technicians?"

"We don't have a lot of those in the frontier. Everyone in the settlements who grows up either inherits the work of their parents or gets picked up by a pirate crew. We don't have your schools or workplaces where mech technicians or ship engineers or any of those other difficult jobs can be raised. The only way to get them is to rob them from others that do have these people."

"I see."

Ves should have anticipated such a custom. He had already heard of the harsh conditions at the frontier before, of how it was sparsely populated, of how the settlements couldn't sustain the technology level of modern humanity, of how schools were virtually non-existent.

If he took some time to connect the dots, then he should have figured out how the pirates truly kept their ships, mechs, space stations and other gear and industry running. No matter how well a pirate could fight, their lethality didn't avail themselves when it was time to repair a broken FTL drive.

Still, to treat the people who fixed up their mechs, ships, weapons and other gear like slaves was a step too far to Ves. He couldn't even imagine how the pirates managed to survive when they became completely dependent on their slaves to run their most essential gear. Weren't they afraid of betrayal?

He forcefully calmed himself down. Blowing up at Ketis benefited nobody and would only worsen their relationship. Right now, he lacked too much data to come to a decision.

"Describe the slaves aboard your Swordmaiden ships, please."

"What can I say?" She whimsically twirled her short locks of green hair. "We Swordmaidens are great fighters, but we simply can't find enough women to work as ship ratings or mech technicians. Every other pirate gang including the big two pirate blocs are scrambling for men to fill up those positions as well, so we're hardly unique at that. The only way to get them is by plundering the treasure hunting fleets who never stop coming to our region of space. Some pirates don't have much luck with that, so they cross over to civilized space and assault some lightly defended space station or isolated colony for slaves."

"How are you able to make them stay obedient? It's a simple matter for any mech technician or rating to sabotage the machines they are working with. One misplaced component, one weakened support structure, a few substances in the fuel tank where there ought to be none, and everything quickly comes crashing down."

"That's the easiest part." Ketis grinned. "You just have to teach them a lesson to know who's boss. Back at the Swordmaidens, Lydia only lets us take men whenever we need to top off our support crew. When we first capture them, we beat them up and threaten them a few times. Most quickly understand the new score, but some need firmer handling. In any case, as long as we have



some Swordmaidens overseeing our slaves, we can stop most of their attempts at cooking something up."

"That doesn't solve the problem of obedience. You can beat a man down, but you can't extinguish his desire to be free."

His Brighter background came to the fore when he spoke those words. Slavery was one of the big taboos of the Big Two, but the Bright Republic valued freedom more fervently than other states.

"Oh, we have plenty of tricks to account for that in the frontier. Whenever we capture a large batch of slaves, we head over to a space station belonging to the Dragon Alliance. The Dragons of the Void offers us a service where we hand over our slaves for processing."

"What does this processing entail?"

"Heck if I know. The Dragons of the Void messes with their heads somehow. They're always the best at this kind of stuff. After they're done with the slaves, they give them back to us after paying some K-coins for the service. Now, our captives have become proper, obedient if somewhat dull little slaves. We don't have to worry about any antics from our new toys after they go through processing."

The Dragons of the Void. One of the biggest two pirate organizations in the Faris Star Region, and an old enemy of Ves. Their tentacles reached wider than he thought.

Ves closed his eyes and practically pressed his eyelids into his cheeks. Bursts of anger, frustration and resignation flitted through his mind. He pushed them aside in favor of cold, hard practicality.

Right now, he needed to be rational.

"How are the.. Processed men aboard your ship working out for the Swordmaidens?"

"As I've said, they're stupid, dimwitted and lacking in imagination. The only merit to them is that they are human enough to make sense of our command, and they have kept most of their old skills and knowledge. They're barely better than bots in that sense. At least they cry out nicely when you kick them around. Bots don't make those satisfying screams of pain when you smack them up."

Ves tried to imagine the life of a man within the Swordmaidens. Stripped of his free will, brainwashed into obeying the Swordmaidens as if they were goddesses, worked to the bone and for the rest of their lives, what difference was there between death and slavery?

At least Ketis never showed too much contempt at him for being a man. Considering that most pirates in the frontier consisted of men, she knew better than to belittle the masculine side of humanity.

Still, this whole custom revealed one massive vulnerability. One that was great enough to jeopardize their entire mission!

"How many slaves are among your fleet?"

"I don't know. We never keep count of numbers like that. To my guess, it's easily a thousand or more men. Our fleet is smaller than yours and Mayra told me that processing the slaves and whipping them into shape to perform their new duties costs a lot of time and money, so we don't go overboard like the Dragons of the Void."

"Don't you think you are inviting a hidden danger in your outfit by relying on slaves processed by the Dragons of the Void?" Ves pointedly asked. "From what I've been told, the Dragons aren't the friendliest or the most reliable bunch."

"Oh, we know." She nonchalantly shrugged before she grinned like a predator. "That's why we tend to stay far away from their territory once we're done. This is a non-issue. Thousands of pirates have made use of their processing service and not once have we heard of a slave revolt. Besides, if something like that did happen, you have to remember they're mostly weaklings who don't even have the strength to rustle up a single chicken. We can chop them all up within an hour if necessary."

"What if they keep their revolt quiet? What if instead of taking up arms they sabotage your mechs, ships and other stuff? Their ship engineers could easily induce a power reactor to blow, or destroy an FTL drive during transit. How can you prevent such instances?"

"As I said, we're not stupid enough to let the slaves work out of our sight. We've stationed Swordmaidens in each compartment they work at, and we do have some smarter Swordmaidens like me who followed some courses or received some tutoring to know what's going on. As far as I know, almost every other pirate gang run their slaves along the same line."

"And the Ravienne Alliance?" Ves mentioned the other pirate bloc. "I've never heard any mention of brainwashing from their organizations. How do they keep their slaves in line?"

"Oh, that's simple. They do some other freaky stuff. It depends on the outfit, really. The most popular methods I've heard are genetically modifying them into ugly abominations to implanting bombs in their brains that automatically detonate once they run out of the range of their assigned ship."

The way these pirates treated their support personnel was abysmal and prone to catastrophe, but somehow they made it work. Ves heard so many surprises today that he simply didn't know how to respond to this all.

"You pirates live in a messed up society."

## Chapter 687 Implacable Women

Pirate Empires lied to him! He thought the virtual board game accurately reflected the woes of becoming a mercenary commander or a pirate commander, but in fact it missed such a huge hole!

In hindsight, Ves recognized that their depiction of how to run a pirate gang was overly romantic and glossed over many essential facts. The biggest one being that pirates relied on slavery to fulfill their shortage in technical and support personnel!

Ves already knew that the Dragons of the Void thumbed their noses against the taboo against brainwashing humans. Enslaving them was a logical follow-up to their loathsome behavior.

Yet commercializing their brainwashing facilities and opening them up to other pirates with too many prisoners on their hands sounded absurd. They basically empowered the independent pirate outfits this way.

The suspicion that this was all a trap grew strongly in Ves. With thousands of brainwashed men working on behalf of the Swordmaidens aboard their precious starships, it only took one single mental trigger to turn them against their erstwhile owners!

The paranoia always brewing within his mind rang countless alarm bells right now! Were the Vandals even aware of the hidden danger the Swordmaidens brought onto themselves?

The Vandals shouldn't be that stupid, and neither were the Republic's intelligence services. This practice of enslaving mech technicians and ship crew should have been common among the frontier.

It still sounded idiotic for becoming too dependent on slave labor to perform vital jobs such as servicing their mechs and keeping their ships from falling apart!

Still, now that his shock had subsided, he began to see that Ketis had no involvement in the matter. Lydia's Swordmaidens embodied both the good and the bad of frontier culture and customs evolved over hundreds of years of surviving among the untamed stars.

"I'm sorry for my overreaction, Ketis." He eventually uttered, looking her in the eyes. "You're not responsible for this matter. However, you have to be aware that my reaction to how you treat your technicians is rather mild. There will be many who will express their disgust at you. Can you at least understand why people like me react this way?"

She was at least smart enough to understand that much. "I get it. Slavery is bad. The big bad MTA and CFA doesn't like it when the weak and stupid are owned by their betters. That's despite the fact that you bunch of hypocrites are doing the same thing in civilized space, only you don't call it by that word! From what I heard what goes on in your side of the border, the life of a regular person isn't necessarily better than being a slave."

"It differs from state to state. The Bright Republic and the Reinald Republic are some of the better ones around. You've visited the Reinald Republic before, haven't you? Didn't you notice the people there are free and happy?"

"All I saw were sheep that have deluded themselves that they are kings." She sneered. "They were so weak that they died by the millions once a bunch of terrorists mechs laid waste to Harkensen I. In my eyes, that incident alone proves that you're nothing if you don't have any way to fight back. The Honored Ones enforced their no-mech policy on Harkensen I so much that they stripped you all from the chance to defend yourselves. Didn't we salvage our own mechs down there? That's the only reason why we succeeded in pushing through the spaceport."

She had a point, if only just. Frankly, the Reinaldians had themselves to blame for getting caught with their pants down. Not only did they scale back the

readiness of their garrisons to an atrocious degree due to their lack of engaging in major conflicts, they also deprived others from bringing them the means to defend their lives if the authorities dropped the ball.

Which they did. On their own feet. Which hurt them a lot.

He sighed. "Okay, I don't want to argue about this point. I'm not hopeful that you'll ever change your beliefs, but you should at least be discreet about it while you are a guest aboard our ships. We do not run our ships as pirates, so I will appreciate it if you don't treat our mech technicians like you treat yours."

"Why should I? I don't really like them. I'm not going to approach them on my own accord." Ketis huffed.

"Look, despite your feelings about them, interacting, instructing and leading mech technicians is a vital skill to mech designers. If you don't know what they do or what their limits are, how will you be able to take over from Mayra in the future? Perhaps you'll be able to learn how to respect them after you work alongside the Vandal mech technicians. They're not the dummies you think they are. Mostly."

"...Can I still kick their butts if they annoy me?"

Ves chuckled a bit. "Sure. I've done so a few times myself if they need some motivating. Just don't go overboard with it, okay? Kick them enough to bruise or sting, but not enough to break their bones or bring them close to death. And definitely don't employ your sword either! If mech technicians die from your hand for any reason, I'll shove you out of the airlock and kick you back to the Jaded Sword through a spacewalk!"

"Whatever you say, teacher. I'll kick you out into space before you can do that to me. I'm stronger than you!"

After Ves defused the tension, he briefly instructed her on the do's and don'ts when they returned to the workshop compartment. As long as she didn't do

anything egregious such as disparaging the mech technicians in public again or mentioning about how they would be treated like slaves back at the Swordmaiden fleet, then the situation could still be salvaged.

They exited the office in a more subdued mood. Ves still mulled over the implications of what he learned about pirate society while Ketis pretended to be contrite.

The little devil. Ves bet she had nothing but contempt when she looked at the Vandal mech technicians.

For their part, the techs returned to their professionalism to keep an even expression around the two mech designers. It looked way too forced to be natural, though. If they had their way, they might have cornered Ketis and confronted her about her slanderous words.

"Morning, Ves." Chief Haine called as she pushed herself forward from her leaning position against the bulkhead. "I just heard an incident happened here. Something about some ugly words being thrown around."

Ketis ignored the burly woman and turned to Ves. "Who is this?"

"This is Carletta Haine, the Chief Technician of the Shield of Hispania. She's responsible for the mech technicians and makes sure that they do a good job."

The guest designer regarded Chief Haine with a mild amount of respect. "It can't be easy keeping your.. people in line."

"It's a skill I've honed over decades of service." The Chief replied simply. Though they only exchanged a couple of words, Haine's dislike of the girl already deepened. "I don't think it is something that you'll ever be able to master. You don't fulfill the requirements to do so. Perhaps you should spend your time elsewhere."

The two women, one as young as a fresh graduate, another in her older and more wizened years, glared at each other as if they were cats competing for the same mouse.

Ves stood by awkwardly as the women decided to have an impromptu staring contest. Eventually, he stretched out a hand between their eyes, breaking their stupid dominance ritual of forcing the other to avert their eyes first. He didn't have time for this nonsense.

"Chief, please, I've got this in hand. I already set the matter straight to Ketis. This is a delicate situation that requires a diplomatic approach." He begged.

The chief glanced at him with an unreadable expression before turning back to Ketis. "Fine. As long as this missy here give my men an apology, I'm willing to forget the matter."

"You want an apology from me?! Then you have to fight for it!" Ketis growled and placed her hand behind her back until she gripped her greatsword. Apologising without a fight was unthinkable to her! "You. Me. The practice ring. If you can beat me flat, I'll give you your apology. If you can't, then you better stay out of my way!"

Ves audibly groaned and palmed his face. What was wrong with these people!? Perhaps he should have expected a stunt like this from Ketis, but Chief Haine as well?

He quickly spread his gaze across the entire compartment and saw that pretty much every mech technician who wasn't performing any sensitive work had slowed down to listen. Over half of their expression showed approval at their chief's attempt at backing them up.

He understood now. Chief Haine had a responsibility to defend the honor of her mech technicians. Failure to do so meant that the mech technicians would lose faith in her leadership and their morale would plummet.



Both of them remained implacable due to the expectations placed upon them by others! They literally couldn't back down in any circumstances or lose all their respect!

As someone with no stake in the matter, Ves took unilateral action. He approached Ketis, grabbed her arm and dragged her away. "Sorry, chief, but Ketis has some work to attend to! See you later!"

It might not have been an elegant way to resolve the standoff, but it did break the spell between them. The Chief stared wordlessly at their backs before heading towards the exit. Perhaps she already found out that there was nothing to be gained from pressing the matter. Not with Ves around.

As for Ves, he had been ready to employ his considerable physical strength to haul the genetically modified vixen away from her staring contest.

Surprisingly, Ketis felt as soft as a pillow. She didn't resist at all, which was completely contrary to his expectations.

Perhaps Ketis became aware of how bad of a situation she was in, and latched onto his move as a way to escape the standoff without repercussions.

"Your chief technician is a formidable woman." She praised. "She can give a lot of Swordmaidens a run for her money."

"Lydia's Swordmaidens don't have the monopoly on strong women, you know. The Bright Republic's Mech Corps employs far more women than the Swordmaidens."

Ves led them over to an inactive 3D printer that he reserved beforehand. "In any case, we need to get back to your lesson. Do you know how to operate one of these?"

"A 3D printer? Sure, though operating them is the job of the sl.. I mean the mech technicians."

"If you have any ambition about mech design, you need to readjust that attitude. Fabricating a mech in person instead of shoving the job to your mech technicians will bring you much closer to your design, or any designs you work with. Part of the errors I see many mech designers make is that they detach themselves too much from the workshop."

"Isn't that supposed to be how we work?" She asked, genuinely confused at his words. "We use our genius to draft up a good design. Then we dump them to the mech technicians and order them to churn out mechs. Nothing in this chain suggests we have to perform manual labor."

Ves really wanted to fix her contempt of mech technicians. He supposed his next assignment for her might fix some of her attitude problems.

"I suppose I won't be able to convince you with words. Fine. I'll just let you have a taste of it yourself." He raised his comm and transferred some files to her comm.

"What's this?"

"It's a design schematic of the Marc Antony Mark I. It's a cheaper variant of Caesar Augustus that you recently struggled with. It's a shame you hadn't been able to finish your variant, so I've transferred the design schematics of my own."

"Oookay. So what am I supposed to do with it?"

"You're going to fabricate a working copy of the Mark I with this 3D printer and assemble it by hand yourself."

"What?!" Ketis shrieked, attracting every mech technician's attention on her again. "Are you daft?! I can't possibly do that! I've never fabricated more than a couple of spare parts! Also, are you allowed to fabricate an extra mech out of the blue just like that?"

Ves grinned at her. "If you're unused to fabricating your own mechs, then this is a good opportunity to get you up to speed. Besides, I'm not telling you to build a full-scale model. Instead, I want you to fabricate a miniature about the length of a human head. I'm also assigning you an imaginary budget. You have to 'pay' for the materials you bring out of the stores. You fail if you run out of money!"

"What happens then?"

"I'll pass you over to Chief Haine and let you work as a mech technician for a few weeks."

Ketis whimpered.

#### Chapter 688 The Unappreciated

Ves heartlessly dumped Ketis at the 3D printer and left her to fend for herself for a while. While he could have stayed with her and supervised her attempts at fumbling together a miniature mech, she already relied too much on help from Mayra or someone else.

A true mech designer would be able to design and fabricate a mech by themselves. Ves always believed in this statement.

Too many mech designers transitioned jumped straight into design teams and collaborative projects, leaving them no opportunity to practice all the skills required to independently design a mech.

Perhaps other mech designers saw nothing wrong with that, but Ves found it to be as neglectful as boarding a shuttle that flew up in orbit while its hatch was still open!

In order to brush up her design skills, Ves left her with the vanilla Marc Antony Mark I design schematics. It was up to her to miniaturize it and to replace unviable components with viable ones that worked at that scale. She also had to replace the cockpit with an AI and remote control module.

"It's just like the time I developed that miniature as a gift to Iris."

The act of converting a full-sized mech to a miniature that you could hold in your hand exercised a lot of different design skills at once. It was a convenient if somewhat distorted representation of how to prepare and fabricate a working mech.

Ves mostly breezed through the exercise, but he had a feeling that Ketis might not fare so smoothly. Still, the experiences she gained out of this exercise would lay the foundation for what came next. He hadn't forgotten about his initial goal to try and stoke her passion.

"However, in order to fire up her passion, there needs to be enough fuel to be present to burn. Right now her accumulation is too shallow. She needs to grow up a little more before she's ready to tackle greater heights."

When Ves exited the workshop, he met Chief Haine yet again. The woman had been leaning against the bulkhead next to the hatch.

He groaned. He did not wish to retread the earlier argument.

"If this is about Ketis, please don't argue about it. Let's just move on, okay?"

"You think it's that simple?" The Chief Technician pressed her fists against her hips. "What she did was inexcusable. It's not easy to keep our mech technicians happy, you know. If you think about it, they rank at the top of the technician branches, right next to ship ratings. However, the tragedy about becoming a mech technician is that while there are plenty of ways to specialize in their ability to service mechs, it's almost impossible for them to get promoted to a higher station."

Ves never poked his nose that deeply in the realities of being a mech technician. Sometimes he fell into the trap that he accused Ketis of. It was all too easy for him to treat the low-skilled and low-born mech technicians as bots in human form, as things to be taken for granted.

They were so inconsequential and interchangeable that if all of their mech technicians got killed and a new batch of them came in, there would be no measurable change to the work being done.

"I don't disagree with you, chief." He said in a diplomatic fashion. "I already know all of this. Is it worth your time by repeating this to me?"

"The job of being a mech technician isn't as glamorous or as upwardly mobile as being a mech designer. It's true that while you lot have it harder, at least you get the benefit of upward mobility. That's not the case with mech technicians. No matter how hard we study or how much work we put into the mechs that pass from our hands, developing our specialties only bumps our paygrade by a couple of notches at most. A senior mech technician doesn't receive more respect than a junior mech technician."

"Mech technicians work in the background." Ves pointed out. "They are the bees that keep the beehive running with their dutiful supply of nectar. They are not meant to be queens like mech designers. A mech designer isn't just a technical profession. It's also a symbol and figurehead for a brand of mechs. The ability and design style of an individual mech designer has a huge influence on the quality and properties of his mechs. The same can't be said about mech technicians."

Chief Haine grew a little frustrated at the wall put up by Ves. "Even so, a good crew of mech technicians is vital for mech designers to realize their designs in the best fashion possible! Damnit, Ves, mech technicians matter!"

"Yes, and no."

"What is that supposed to mean?!"

He really didn't want to deal with this nonsense, but interacting with Ketis and her distinct beliefs had put him in a strange mood.

"Although I don't condone the beliefs spouted by Ketis, I think we should be clear that mech technicians are essentially semi-skilled labor. Sure, they need to be handy with machines, but compared to mech designers, they are expected to learn a lot less of the sciences needed to understand mechs. I could even argue that mech technicians aren't able to explain how mechs work. While I value your mech technicians and agree that they should be appreciated, I think it's a mistake to elevate them to a pedestal that's too high for their merits. A tech is a tech."

Her face turned inscrutable as she tried to parse his words. Ves had strayed somewhat from the initial topic that she couldn't figure out how to respond to it. Was he wrong? She wanted to say yes, but deep down she knew better. She hated Ves for reminding her of those thoughts.

"Ves, I think you should stop talking before you slander my men."

"My apologies. My mind has been muddled lately by the nonsense of our little pirate guest. Are you.. are you aware of the true plight of mech technicians employed by pirates?"

Surprisingly, she nodded. "I'm a chief technician. It's my job to know this stuff. One of the responsibilities the Mech Corps has entrusted to chiefs like us is to stop our subordinates from thinking that working for pirates is a better idea. You always see some idiots every now and then who develop romantic ideas about becoming a pirate. Once I beat it into their thick skulls that they're going to be treated worse than dirt, they'll quickly drop their unrealistic notions."

"How often does it crop up?"

"Oh, it depends on where they work and who employs them. A mech technician in military service is a notch above the rest. The only way you can do better is if you're assigned to be part of the permanent maintenance crew of an expert mech. Even then, once every two months or so, one of my men

or women inevitably think they get more pay and liberties if they go pirate. The lengthy tours, the restrictive rules and lack of promotion opportunities always gets to them somehow. Not everyone is cut out for military service."

Certainly, their lot did not seem very attractive to Ves, but they enjoyed higher pay than other types of technicians and they get to work with mechs. As far as Ves was concerned, the latter was already a reward in itself. In the Age of Mechs, many people wanted to work with mechs, but only few became qualified to do so. Becoming a mech technician wasn't hard because it didn't require too much talent or learning ability, but it wasn't easy either as they needed to display an instinctive aptitude with machinery of all kinds.

Someone who didn't feel comfortable with working with machines all day had no right to become a mech technician. In this day and age where humanity became unprecedented dependent on machines of all kinds, a surprising majority of people lacked this essential touch.

Baseline humans evolved too slowly to keep up with their tool-using ways.

The two parted on less-than-stellar terms, but Ves knew Chief Haine would get over it. Her professionalism and sense of duty demanded it. Besides, she knew better than to hold Ves against his own beliefs when many other mech designers thought the same.

Just because Ves disapproved of treating mech technicians like outright slaves didn't mean he became their advocate. Certainly, he enjoyed the appreciation of his own men, but he never once forgot they worked for him, not the other way around.

Mech technicians were never meant to be the stars of the show.

Back in school, Ves became exposed to case studies where mech designers became too chummy with their mech technicians. They passed on an

unprecedented amount of authority to the chief technician and the individual mech technicians, so much so that they half-ran the company!

All of the mech companies in the case studies eventually came to ruin because letting mech technicians take charge was like putting a toddler at the helm of a starship. There was no way it would end in anything other than a crash!

"The only way a mech technician can obtain a better future is if they study hard and become certified as mech designers by the MTA."

However, how easy was it to do so? Many mech design students actually dropped out during their grueling years of study. For someone with much less intelligence and much less opportunities to catch up to mech designers might take at least two or three decades.

And what then?

A fifty-year old Novice Mech Designer possessed absolutely no career prospects in the brutal and competitive mech industry.

The only other way they could become something greater than a faceless tech was to become handier with machinery than others and acquire a lot of leadership and administration skills. Once they demonstrated their superiority in terms of getting mech technicians to do as they were told, they stood a good chance at obtaining the certification that upgraded their status.

A chief technician interacted directly with mech designers and possessed a lot of say in terms of how to run a workshop and their crew of mech technicians.

However, no matter how much power they wielded, chief technicians couldn't escape the fact that they were essentially jumped-up mech technicians.

"It's no surprise that some people treat them like slaves. Free or not, they essentially serve the same purpose."



The way the Swordmaidens and the rest treated mech technicians and perhaps mech designers reminded him to be vigilant whenever he stepped into the frontier. Even with the Flagrant Vandals as a shield, Ves still didn't feel very safe in this region of space.

Though his fears frightened him, a small part of him actually relished it. Back in civilized space, Ves always tangled with the fact that he was but one among many mech designers. It was impossible for any single mech designer to stand out from the market unless they became a Senior Mech Designer who already developed a hint of true uniqueness in their design traits.

Reaching this point was way too distance to Ves.

On the other hand, Ves felt as if his recent experiences had brought him increasingly closer to advancing to become a Journeyman Mech Designer. His continued insights cleared up most of the fog surrounding this difficult advancement process.

Ves feared no challenge. He only feared not knowing the way, so the removal of all the fog did him a favor.

Right now, he faced a dilemma of sorts. Of the three fundamental requirements to advance to Journeyman, he was already steaming ahead in terms of shaping and maturing his nascent design philosophy. He also learned more than enough to satisfy the knowledge requirement.

The only sticking point to him was that he possessed few opportunities to increase his utilization of his existing Skills. However, none of the work on his plate sufficiently challenged him to the point where he needed to pull all the stops.

"Also, I somehow fell back into the old trap of hoarding new knowledge again." He shook his head.

He knew that his current studies in ultracompact batteries and stealth technology formed a not entirely welcome detour in his goal to advance as quickly as possible.

Nonetheless, he believed that taking this detour now rather than later would save him a lot of grief, and possibly even his life. With disaster lurking everywhere in the frontier, improving his personal capabilities came first. He could think about advancement after he secured his life!

### **Chapter 689 A Mech Designers Complicity**

The Flagrant Swordmaiden fleet transitioned back into FTL as soon as their drives finished cycling. A period of enforced isolation encroached again. Despite travelling along the same route and at the same speed as the other ships, the Shield of Hispania existed in a completely isolated bubble of higher dimensional spacetime.

No ship ever crashed into another ship during FTL travel.

A subdued mood overcame the crew as they quietly and diligently performed their duties. Ves knew the isolation would only get worse over time. They had barely crossed some lightyears into the frontier at this stage.

A few uneventful days passed by. Ves struggled with his schedule as he had so many activities to do but so little time to devote sufficient time on any of them. He wished he could clone himself by at least three times.

It was too bad that perfect clones of existing people never worked out well. If Ves had a choice, he would have formed his design team entirely out of clones of himself. He'd never have to face trust issues or be wary of betrayal from his own underlings.

"Though if they are exact clones of me, they won't be content with staying under my thumb. I've got to brainwash them as well or otherwise it's guaranteed they'll stab me in the back.

He knew himself too well to rule out such a possibility.

"Pfff. What am I thinking? Cloning myself just to pad my design team? Am I really that desperate for competent mech designers?"

As a temporary head designer, Ves gained a lot of experience in leadership matters. While he may not be as good with people as Chief Haine, he possessed enough confidence to be able to convince a down-on-his-luck mech designer to come work for him in his design team.

Still, mech designers desperate enough to join someone else's design team would never match the ability of an independent mech designer. Ves hungered to assemble a team of true talents, ones who could actually keep up with his progress and drive.

Building such a dream team was a lot harder than it sounded. Just like Ves, who would want to serve under his thumb when they possessed enough ability to start their own business?

It was a paradox. He could easily hire unworthy mech designers, but they wouldn't be able to help him much. As for the worthy designers, their demands were so high that it was impossible for Ves to hire them as a subordinate.

Still, that did not mean nobody came up with a solution to this paradox.

"The only way to rope them in is by treating them as an equal partner. A collaborative project is required, rather than a project led by a design team."

The difference between the two were stark.

A design team explicitly imposed a hierarchy among mech designers. The most capable mech designer became the lead designer, while the much less capable mech designers had to resign themselves to the role of assistant designers.

Those with slightly more ability or brought in just to supplement a specific aspect of the design were normally regarded as contributing designers. They contributed a discrete portion related to their specialty and didn't involve themselves any further in the design.

Throughout it all, the lead designer held the reins throughout the design process. The mech being shaped by many different hands solely carried his name. The contributing designers only received a brief mention, while the influence of assistant designers was so marginal that they were often left out entirely.

Due to his theories on Spirituality and the X-Factor, Ves favored setting up a design team because the entire team of mech designers had no say in the matter. Only the lead designer's vision counted. This way, Ves would be able to maximize his imprint onto his own design and foster the strongest possible X-Factor.

As for collaborative projects... Ves grimaced at the thought. The lack of control and the need to respect the input of other mech designers as an equal rankled Ves because his design philosophy wouldn't be able to play out to its maximum potential.

A true collaborative project in the classical sense treated every mech designer involved as co-designers. No one had the right to claim the role as lead designer and boss over the others.

The purpose of a collaborative project was to pool each mech designer's strong points while leaving out their weaker aspects. Therefore, no single mech designer was allowed to become dominant, as the more say he had, the more the jointly-developed design inherited his weaknesses as well as his strengths.

The deal Ves made with the Skull Architect entailed something in between the two. Instead of working jointly on developing a design that shared both their strengths, Ves would instead be tasked with developing fifteen different variants of the Senior Mech Designer's existing designs.

While he'd be able to leave a small mark on the variant he developed, the core of its design still bore the DNA of its original creator. Due to all the restrictions imposed by the Skull Architect, the influence that Ves could leave behind only reached the level of contributing designer, which was hardly a glamorous role.

"Still, proving myself or leaving behind my mark isn't my true goal."

Instead, Ves hoped to tackle the incredibly difficult puzzles any of the Senior Mech Designer's designs represented. The challenge spoke to him. Not only would the difficulty force him to flex his design skills in increasingly inventive ways, thereby raising his utilization of his existing Skills, he would also be able to glean the best practices of how to design different types of mechs.

"That's the true benefit there."

Ves had to be careful to avoid becoming mentally contaminated by the Skull Architect's raw and unfiltered design schematics. If not for this hazard that constantly threatened to subsume his design philosophy, he would have instead bargained to gain access to more of the Senior's designs!

"This is one of the hidden benefits of this collaboration."

In the mech industry, a line existed between imitation and creation. Ves always considered himself on the side of creation. Though his past work with the Caesar Augustus heavily steered his design habits and preferred solutions, he wasn't afraid of developing something new when it suited him, or else he wouldn't have developed a rifleman mech as his second original design.

However, as he planned to fill up his mech catalog with at least a dozen product lines that covered all the essential mech types, he would have to stray increasingly further from familiar ground.

Having an example to draw upon and practising with another fully-fledged mech design would do wonders in preparing him to design his own mech of the same type.

Therefore, despite the inherent risks and difficulties involved in paying back the favor Ves owed to the pirate designer, he didn't flinch away from this duty at all.

The only issue weighing on his conscience was whether the Skull Architect commercialized his variants.

"Will he put up copies of my variant for sale to pirates?"

The Skull Architect gained renown as a high-end mech designer in the Faris Star Region. This made his designs desirable but also extremely expensive and so difficult to pilot that only elites possessed the qualifications to touch them.

Ves anticipated that his variants may be released as more accessible products priced towards the premium or mid-range markets.

If priced competitively enough, which Ves had a feeling the Skull Architect would definitely do so to maximize his profits, the fugitive mech designer stood to sell a large amount of mechs.

"The market for pirate mechs is smaller than the mech markets in civilized space. Then again, there aren't many pirate designers either, so my variants faces much less competition."

A troubling and unsettling thought sank into his mind. What if he achieved a far greater market share and commercial success as a pirate designer than a legitimate mech designer?

With the Skull Architect's stature as a venerable Senior, it was guaranteed his products would sell widely if they became a little cheaper and a lot more easier to pilot.

"By the heavens. Is he planning an aggressive expansion into the local black market for mechs?!"

Ves couldn't fathom the scale of such ambition. How many copies of 'his' variants would get sold? A thousand? Far too little. Ten-thousand? A hundred thousand? If the Skull Architect was able to export his designs to the neighboring Star Regions as well as the black markets of the nearby Star Sectors, then it wasn't impossible for the total sales figure to surpass a million mechs!

"Damn it, by my estimate, my Living Mech Corporation has only sold a couple of thousand mechs so far, and I'm only counting mechs rolled off directly from the production lines of the Mech Nursery. The amount of mechs fabricated by the LMC's third-party manufacturers have probably reached the tens of thousands."

Such a success already elevated his mech company into a mainstay of the Bright Republic, but this achievement paled in comparison to what any Senior Mech Designer could accomplish in their sleep!

Even if the Skull Architect faced a severe amount of limitations due to operating out of the impoverished and underdeveloped frontier, Ves had a suspicion that a Senior wouldn't be slowed down too much by such hindrances.

"This is bad."

The more his products landed in the hands of pirates, the greater the chance their designs might get traced back to Ves.

In addition, Ves hadn't yet addressed the elephant in the room.

Pirates being pirates, they were guaranteed to be up to no good if they piloted the powerful variants. If all of them ended up similar to what he had done with the Leiner Grey, then they would all end up very powerful but also remarkably easy to pilot. Carrying the essence of both the Skull Architect and a small but undeniably impactful influence from Ves, such variants were simply too lethal to comprehend!

"Compared to all of those rust buckets most pirates use, the difference is as wide as heaven and earth!"

In essence, by fulfilling his obligations to collaborate with a criminal mech designer, Ves directly became complicit in empowering a large amount of pirate gangs!

The ethical implications of such a consequence were too dire to comprehend!

All the misery and all the killings perpetrated by 'his' customers indirectly bloodied his hands.

It was different from his legitimate business activities. Ves easily ignored the implications of guilt arising from the actions of the customers of the LMC. Every mech his company sold passed through the MTA for certification, and even the purchase contract contained the trade association's stamp. Anyone too shady would never be able to pass muster in front of the MTA.

Of course, a couple of fish always slipped through the net. Ves did not think too hard about those exceptions. In some way, he already factored in the tragedies perpetrated by scum using his mechs.



Ever since Vincent Ricklin massacred his own family with a rudimentary custom mech from Ves, he tried hard not to become affected by such tragedies.

"It's easy to do so if it's limited to a small number of bad apples. No mech designer can't prevent misuse of their own mechs. It's the nature of our business to factor in this possibility."

It became a different story entirely if the basket predominantly consisted of bad apples. A mech sold in a mech market that comprised almost entirely of pirates and all sorts of other scum would undoubtedly use his products for more nefarious purposes.

The issue of responsibility and attribution always plagued mech designers throughout their careers. Even if mech designers absolve themselves of responsibility as soon as they completed a sale, ethically the issue continued to weigh on their minds.

To what extent did they facilitate the misdeeds of their customers? Every mech manufacturer and weapon manufacturer struggled with this question, to the point where no right answer existed even up to this day!

Ves himself had swung from exhibiting a high level of detachment to a high degree of empathy and care to the mech pilots of the mechs that received his touch.

He became emotionally invested in the mech pilots of the Flagrant Vandals because he became responsible for the well-being of their mechs.

However, he cared very little for the customers of the mechs sold by the LMC. His customers handed over money and in return they received a mech. Once they completed the transaction, his customer might as well attack a nursery and kill a hundred little kids and Ves wouldn't lose any sleep over it at all.

After all, what did some crazy mech pilot have to do with him? If the public started blaming the mech designer for enabling the madman by supplying the mech, the same argument could be made about the company that manufactured his clothes or the venue that sold him his latest meal.

So why did he care so much about his pirate customers in the first place?

### Chapter 690 Mirrored Fates

Ves put off his thoughts on the matter of complicity like he always did. Some day, he'd be confronted by it and have no choice but to make a definite choice, but for now the issue had not yet become too pertinent.

Besides, the Skull Architect may not have any intentions of commercializing his variants. Perhaps the old man only wanted to study Ves' design philosophy for research purposes.

After all, a sacred design that a sagely Senior had masterfully crafted together would inevitably become spoiled by the crude touch of an immature Apprentice.

It was as if an expert painter finished ninety-five percent of his painting, but left the last five percent to a three-year old kid who drooled onto his shirt. No matter how prodigious the kid was in painting the gaps, unless he was some freak reincarnated master painter, the quality of that five percent was assuredly abysmal in the eyes of the original artist.

So Ves still held out hope that the Skull Architect valued his pride and reputation too much to rely on the work of an Apprentice to earn some extra K-coins.

"Though if the sales potential of my variant is too promising, I don't know if it will stoke his greed."

Mech designers never had enough money! Developing mechs and running an industry constantly demanded more funds to sustain.

A Novice might get by with a couple of hundred million bright credits that they could gain from a loan.

Apprentice almost always required an investment of several billion credits.

As for Journeymen, Ves had no idea how much they needed, but he believed even 100 billion credits might not be enough.

Seniors on the other hand... their vast research projects and huge business enterprises could only be sustained by an uncountable sum of money!

Ves could not even fathom the exact sum, but he knew that this was one of the reasons why Seniors based in the Bright Republic almost never succeeded in advancing to Master!

"When the Skull Architect used to be a respected Senior in the Vermeer Group, money is the one resource he must be lacking the least."

From extreme abundance to extreme poverty, the shift in earnings must have represented such a shock to the man that he might have suffered lingering trauma from that event!

"Damn.. Seniors can't be money grubbers. They can't. It's undignified!"

Would a pirate designer who already became disgraced even care about dignity anymore?

Ves grew pensive at the thought, because he knew what his decision would be when put on the same spot. "Dignity is not the same as reputation. The Skull Architect is playing by different rules now, otherwise he'd go by his real name and not this nickname. Selling some lesser quality mechs under your name is more than worth it if you can rake in the K-coins and spend them on furthering your research or strengthening your position in the frontier."

To mech designers, gathering K-coins was not an end in itself. It represented future benefits in a universal form. While it required time and effort to convert

K-coins into something useful, he vastly preferred being able to spend some at all rather than none.

In conclusion, a mech designer that wanted to more than sit on their laurels had to spend lots of money to progress. Someone as ambitious as the Skull Architect once ordered the deaths of more than a thousand mech designers including an expert in order to further their research. Would who was willing to ignore the basic rules of morality really be bothered by lesser desires?

Ves grimaced even further. It was rather eerie to be able to predict the Skull Architect's thought process and logic to such a deep degree.

"We are kindred mech designers."

The statement rang false, yet contained enough truth to stick in his mind.

The root of it lay in the fact that mech design was an art as well as a science. The science provided the building blocks on how to design a mech, but art provided the creativity that connected the blocks into unique and original structures.

A normal artist produced boring, normal art. A maddened, tortured or insane artist produced extreme works of art.

Somehow, the benign intent behind the advancement ladder of mech designers from Novice Mech Designer to Star Designer began to fade away. Left in its place was a vortex of madness, a hungry maw that called out a siren song seducing trillions of naive mech designers to sacrifice pieces of their sanity in exchange for power.

"This is madness!" He spoke, though whether he referred to the trap that lay behind the advancement ladder or what his overactive imagination cooked up wasn't clear. "Mech designers are not sacrificial lambs who willingly lead themselves over to the altar to be butchered!"

Ves forcefully discarded this entire train of thought before it led him deeper into lurid figments of his imagination. Even though all of his spurious deductions sounded compellingly truthful in a horribly morbid fashion, it didn't change the fact that he had no solid proof to substantiate any of these fantasies!

He frowned as he sat behind his desk in his empty office. Paranoia always lingered in his mind ever since his father became a fugitive of some secretive trans-galactic organization that rivalled the MTA and CFA in influence. Yet lately these outbursts of spinning conspiracy theories on the fly was plainly out of the norm for a rational mind that dismissed any claims that lacked solid proof.

"My mentality is.. degenerating? Cracking? Becoming less stable?"

He palmed his forehead, trying to look into his mind. Sadly, his thoughts bounced everywhere except where he wanted them to be. He never possessed the most orderly mind.

"That time when I ate a completely alien exoplant also didn't do my mind any favors. I still don't know what that so-called Heavenly Flower exactly did that makes Dr. Jutland so obsessed about nurturing it. I have a feeling it's not supposed to be eaten raw at all..."

In any case, flower or not, his mind was as ephemeral and disorderly as always so long as he left it alone. His Spirituality made no difference in that aspect. In fact, it might have amplified the disorderly thoughts running in his subconscious mind.

The only advantage of his potent mind was that once he concentrated deeply on something, all of that energy aligned itself to his intentions. He could breathe life to images created in his mind, he could expand his senses and try

to sense other people's auras, and he suspected that he might one day be able to affect their emotions as well.

Still, he couldn't maintain his concentration on a single subject every waking moment. Humans simply weren't geared that way.

Ves simply had to accept that this was the price he paid in exchange for the increased capabilities that allowed him to bestow his mechs with a strong X-Factor. He only hoped he could figure out a way to tame his unruly mind and its frequent irrational impulses. Perhaps the Five Scrolls Compact managed to figure out a way to restrain these urges.

"...Or maybe not. By all accounts, the organization is completely made up of crazies and mad scientists."

That sounded remarkably familiar to what Ves had just thought about mech designers. It reinforced the notion in his mind that the Five Scrolls Compact mirrored the Mech Trade Association.

One was in the dark, the other in the light. Both provided vital services to humanity, even if Ves didn't wish to acknowledge that. He had recently determined that powerful men and women would do anything to extend their lives by a few hundred years. As the supposed inventors of life-prolonging treatment, they offered the most attractive incentives to those who were willing to sell their souls to the terrorist organization.

One organization worked with machines, the other with life. Both tried to research the depths of their own fields, often going through extreme lengths as they did. Perhaps the only reason why the MTA remained respectable while the Compact became so ostracised their existence was scoured from the public was that their research demanded too many human lives to progress their research.

"What happened to the Skull Architect is an exception. Most of the research that Senior Mech Designers conduct won't harm anything but a couple of machines, which they can easily replace as long as they have enough money."

This comparison only served to strengthen the suspicion in his mind that mech designers all dabbled with madness. They were only tolerated because they limited their hurt to machines.

Would Ves become as unhinged as Dr. Jutland one day? As someone who treasured and respected mechs, and wished for them to be treated akin to humans, would he be forced to torture his own mechs to further his research in making them come alive?

"I don't believe it will come to that!" He spoke to himself with conviction. He needed to believe in his own statement.

"There's an apt analogy that describes the state of mech designers."

If people likened mech pilots to gods, then mech designers were regarded as wizards. The more they progressed, the more their abilities left the boundaries of science and increasingly took on unknown mysteries that others struggled to explain.

How could average people without a background in science explain it as anything other than magic?

Yet the comparison to wizards may not always be benign. Just as wizards were prone to descending into obsession and madness, so would mech designers and other kinds of researchers.

The MTA fell into the camp of light wizards while the Five Scrolls Compact counted among the dark wizards.

Yet for all their differences, they shared the same fate in the end, because they were mirrored reflections of each other.

"What am I doing here letting my thoughts run wild? I should do something to distract myself."

The whole spat with Ketis and Chief Haine already grated on him. Ves resolutely tried to avoid descending into darker thoughts by resorting to his most familiar trick.

Concentrating his mind on a project.

Ves turned on his terminal and called up the dense and abstruse research papers related to ultracompact batteries. He felt unprecedentedly motivated to increase his understanding in their contents quickly.

The sooner he was done with this step, the faster he could end his exposure to their mental contamination.

The safer approach might have been to take it slow, but a persistent, low-level influence on his mentality had the potential to be much more insidious due to how it affected his subconscious rather than conscious mind. He could catch any changes of the latter before they spun out of control.

A few days passed by like this while the Flagrant Swordmaiden fleet continued to be in transit to an unknown star system in the frontier.

Perhaps it was the madness tugging at his mind, but Ves progressed quite a bit faster than before. The cracks in his mind may have frayed his emotions and led them to strange outbursts that he consciously needed to suppress, but they also liberated his mind from established logic and rules.

By making incredible leaps of logic that he never would have done with his rationality fully intact, he sometimes progressed by leaps and bounds.



Research papers that required three or four days to comprehend their essence only took half a day for him to understand!

"If this is the benefit of losing a bit of your insanity, then no wonder!"

Ves at least hadn't thrown out his common sense. Each hour, he took a lengthy fifteen-minute break in order to center his mind and neutralize the damage he incurred on his mind. Some cracks in his mind proved helpful in processing the difficult theories, but he couldn't afford to widen the cracks until his mind permanently became stuck in this state.

He only wanted to take advantage of the state of madness, not revel in it! Though the temptation to embrace it in order to further his mech design abilities was huge, he was able to resist the temptation because he already possessed something better back at Cloudy Curtain.

Ves already had his hands full with his current eccentricities.