

### Chapter 441 Death Traps

The 6th Flagrnt Vandals only appreciated the Hellcat design due to its iconic status within the mech regiment. Even then, the Vandals hadn't actually invested a lot of resources into improving the design.

Even if the Mech Corps hardly sent any mech designers to the Vandals, couldn't they have supplemented their design teams by hiring them on their own?

Ves didn't understand why they placed so little importance to the design department. Professor Velten was supposed to be chummy with Colonel Lowenfield. Couldn't the Senior Mech Designer make a better case for her department and stop its gradual deterioration?

"Well, I'll be taking a look at another piece of the puzzle soon."

Once Ves finished his talks with the other two mech designer, he proceeded to take up his first task. This time, Professor Velten wanted him to focus his efforts towards the Inheritor design first.

"It's the most prevalent model of the Vandals." The professor told him.

"Therefore, I'd like to see if there is any way you can make a contribution to its design. Even a minor improvement can save dozens of lives due to how much the Vandals depends on this design."

Therefore, his first task was to listen to the people who worked with the Inheritor mechs on a day-to-day basis.

Ves looked down at his comm and set his destination. The device flickered to life and projected a small line that led him through the confusing maze of corridors of the massive factory ship.

"I'm finally stepping out of this cage."

As he went through the corridors and took a few lifts downwards, Ves saw lots of new things. He passed by several important compartments, such as a workshop that repaired broken mech components to a mineral processing area that turned raw asteroids into usable resources.

Each of these sights opened his eyes to what the Wolf Mother hosted. At the size of a capital ship, she could truly be called a mobile factory in space.

"There's so much industry going on inside this ship."

He already knew in an abstract way that the Flagrant Vandals depended on the Wolf Mother along with a couple of smaller logistics ships to keep the entire mech regiment afloat. Yet he never got exposed to the extent to which the Vandals worked to make it possible.

Besides being struck by the scale of these operations was the fact that everyone who worked in these compartments wore the uniform of a Vandal. That basically meant that they were proper servicemen and not some kind of civilian help they picked off the streets.

It made sense for the Wolf Mother to be staffed by so many support personnel, but his estimate on how many people worked aboard the ship had to be adjusted upwards by several thousand people.

"Repairing broken mechs and fabricating new ones is a massive industry in itself."

Ves genuinely admired the entrepreneurial spirit of the Vandals. Without access to external sources of funding, the Vandals managed to scrape by on their own with the help of their factory ship. And besides the whacky FTL engine, the Wolf Mother was very well put together for a vessel that the Vandals constantly worked upon. Ves hardly noticed any flaws in the structural integrity of the areas he walked by.

After a long walk, he finally reached one of the hangars where the Vandals assigned a squad of spaceborn mechs. Though the Wolf Mother always tried to stay out of fights, sometimes the fight came to her. It was imperative for the factory ship to possess some means of defending herself.

As Ves came up to the nearest hangar, he went through a security check before being allowed inside.

"Wow."

The space wasn't very big. Compared to the cavernous hangars of the Ark Horizon, the hangar he entered could only fit a squad of ten mechs and some spare machines. In order to save a lot of space, the ceiling of the hangar was kept as low as possible. This made it rather awkward to move around the spaceborn mechs as they couldn't utilize their flight systems without mashing their heads to pieces.

After looking around, he spotted a Vandal wearing the markings of a chief technician. Ves waved at the woman and approached her as she supervised the modification process of an unknown Vesian mech.

"Chief Carnon?"

The middle-aged woman nodded her robust-looking head while she chewed a stimulant. "You must be the new kid the old hag told us about. She made you out to be some kind of mech whisperer. Well, you don't look like it."

Chief Jezebel Carmon didn't look to impressed with Ves, and he didn't blame her for that. His official track record was rather thin and he was still very young to be working with designs on this level.

"Are all chiefs supposed to be acting as tough as nails?"

"It comes with the job. You try ordering around a bunch of numbskulls for a couple of years. My men will do the strangest things if I'm not around to keep them in line."

Chief technicians knew their way around with machines a lot better than the average mech technician, but their true value lay in their leadership abilities. Without their steady presence, any mech maintenance department would fall apart.

"I'm here to help with the Inheritor design. First up, can you lead me to a copy of this mech?"

"Sure. Follow me."

A couple of mech pilots milled about. With the Wolf Mother constantly travelling in FTL, there wasn't a great need to keep the mech pilots on hand. Still, in the event the fleet she travelled with entered into an ambush, at least a couple of mech pilots needed to be ready and waiting at all times in order to deploy the moment the Wolf Mother returned to realspace.

Ves imagined the mech pilots of the Vandals to be a little rowdy, the opposite of the mech pilots of the elite regiments or companies. What he actually saw were mech pilots that fell in between.

They didn't look as classy as someone like Captain Vicar, but neither did their appearances resemble the disheveled gang members of Walter's Whalers.

If nothing else, they resembled highly disciplined mercenaries.

Chief Carmon led Ves to the nearest Inheritor, which also happened to be in a sorry state. Its razor-thin armor suffered gashes to its legs and its torso. His judgement told him that this inheritor had been targeted by a single rifleman mech.

A mech pilot stood in front of his mech with a pensive face. Upon sensing someone coming close, he turned around and greeted Carmon and the newcomer.

"Lieutenant Chandis, this is Ves Larkinson, a mech designer from the labs. He's our latest liaison."

"I liked the old kid better." Chandis muttered, completely disregarding the fact that Ves stood in front of him. "That last mech designer was a good listener, and he always promised to convey my wishes to the professor."

"Lieutenant, I am not that mech designer. I'm much better than him, in fact."

The lieutenant chuckled. "Do you, now? We'll see about that."

Ves looked around and tried to change the topic. He settled on the Inheritor that the mech technicians were in the process of beginning their repairs.

"What happened to this mech?"

"Our opponents lucked out during the last raid. We steamrolled a Vesian trade convoy a few months back and made it out with a handsome amount of loot. It's too bad the comrade who piloted this mech is still recovering in the infirmary.

"If this mech got damaged a few months ago, why hasn't it been repaired yet?"

"We're short-handed." The chief bluntly replied, and waved her arm to encompass the entire hangar. "This is only one of several hangars aboard the Wolf Mother, and her maximum capacity pales in comparison to the dedicated hangars aboard a proper fleet or combat carrier. Hiring has always been difficult for us so we're working at our wits end sometimes. It doesn't help that the factory ship assigns most of the mech technicians to the production lines or the mineral processing machines."

"I see."

Same as the design department, it turned out the maintenance department suffered from a shortage of people as well. When Ves previously passed through the other compartments, he didn't get the idea that they suffered from a shortage of skilled workers.

Strange. Why hadn't the Vandals managed their manpower better? He would have thought that skimping out on the mech technicians led to many delays and mistakes with regards to servicing mechs. What were they thinking?!

Ves began to ask more questions about the Inheritor. He wanted to know why it looked so shot up after only suffering a couple of solid hits.

"The armor might as well not be there. It's sufficient enough to resist small arms fire, but mech-sized weapons encounter no obstacle when they strike the Inheritor."

"Doesn't it possess enough speed to mitigate most incoming attacks?"

"That's what it's supposed to do. The reality is that there are many situations where we have to slow down or stop. Just think about it. When we raid a trade or supply convoy, we have to match our speeds relative to the transport ships we're aiming to raid. The delta vee will practically approach zero when we come close."

"What about its flight system?" Ves continued his questioning. "The Inheritor is supposed to possess a very high thrust-to-weight ratio. It shouldn't be too difficult to keep jinking back and forth."

The lieutenant scoffed at that. "Jinking around like that all the time will eat up our energy cells and put more stress on the frame. The Inheritor is so fragile that there's a very real risk of breaking something important if we shift our mechs in an abrupt manner."

"You don't think much about the Inheritor, do you?"

"Yeah. Unlike the dumb recruits that trickle in from time to time, I've been a Vandal long enough to understand how badly we need to squeeze our budget. If it were up to me, I'd say we should throw away this worthless design and transition to whatever light mechs the Vesians are using."

"The higher ups already thought of that." Chief Carmon said. "They quickly decided that there's no way they can rely on raiding to supplement our mechs because we can't get enough light skirmishers. Every transport that ships over a batch of mechs always carry a hodgepodge of different designs. It's really difficult to get the type of mechs we need the most."

"That still doesn't mean the Inheritor has to be as thin and cheap as possible!" The lieutenant screamed back. This time, Ves could feel the force of the mech pilot's indignity. "We have so many Inheritors lying around that we don't know what to do with them. Why can't we invest in tougher mechs that are a little more expensive to make than what we have right now?"

"I think it's a numbers game to them." Ves speculated. "A smaller number of more capable mechs won't be able to hold out against a large number of low-quality mechs. This is very important for a mech regiment like the Whalers. They need to spend their money as best as possible."

Ves did not dare to pass any judgement on that scheme. Instinctively, it made a lot of sense, but the constant casualties and the frequency of the mechs turning into floating wrecks in space remained very high.

It was as if this had been a deliberate choice.

The lieutenant showed Ves around the Inheritor after he finished his grumbling. Chief Carmon hovered close and commented on the uncommon features of the Inheritor design.

"You see these arms here? They're one of the strongest parts of this mech, as skirmishers rely on their arms and how much weight they can put behind them to penetrate through armor. It sometimes gets really difficult to peel away the armor plating of a tough ship like a combat carrier."

Ves noticed that. Normally, it didn't really hurt if the arms were oversized, since a spaceborn mech always fought in space. As long as the design balanced out the arms to the rest of the frame, it would still be able to fly in space on a stable trajectory.

"Are there any problems with the arms?"

"Not as such, but I have a couple of pet peeves about them." The lieutenant replied.

Ves nodded as he inspected and touched the arms up close. The scarred and tarnished alloys felt cool to his touch. "Let's hear it then."

#### Chapter 442 Calculus of War

Lieutenant Chandis had a complaint for practically every aspect of the Inheritor model. Much of the reason why was because its design had been tailored for what the higher ups thought what was best for the entire mech regiment.

The wishes of the individual mech pilots who would have to rely on these death traps to survive in space hardly registered in comparison. Every improvement needed to be weighed against more practical concerns such as cost and ease of fabrication. If either of these two factors became negatively impacted, then Professor Velten wouldn't approve of the changes.

Therefore, much of the complaints he heard from Chandis had already been echoed by the reports he read from the database.



Still, there was a huge difference between reading about the problems from a dry and succinct document compared to hearing it from a mech pilot who had to deal with the consequences on a day-to-day basis.

Chandis probably knew about some of the concerns that played in the background, but he made a persuasive case anyway, largely by employing his emotions.

"Too many comrades have died from this inadequate piece of dung!" Chandis kicked at the plating of the mech. Despite being relatively thin in the scale of mechs, a human foot could never leave a mark on its surface. "Look, just tell your bosses to invest some more money into quality mechs. These Inheritors aren't worth the materials they're built from!"

"It's actually the opposite." Chief Carmon remarked from the side. She maintained her jaded expression throughout the lieutenant's tirade. "The Inheritor is doing a great job in maximizing the strengths of its materials. The only problem with this approach is that there's a limit on how much we can optimize their strengths and create more synergies."

In other words, it was as as if the Vandals sculpted a miniature mech out of sand. No matter how exquisite they carved the model of a mech, one good kick could effortlessly blow it away.

Fiddling with the shape and dimensions of the sand model only affected its structural integrity by a minor degree. Such changes would never be able to provide a comprehensive boost in survivability.

The only way to do so was to carve the miniature mech model out of a stronger material such as stone or wood.

However, doing so demanded more money and effort from the Vandals. Ves had read the internal documents on the Inheritor, and in one of them

Professor Velten brutally calculated the cost efficiency of switching the Inheritor's material composition to a stronger mix.

She concluded that increasing the costs by fifty percent would only raise the overall longevity of any random Inheritor mech by twenty-nine percent or so.

To Ves, that sounded very normal. Only at the lowest end of the mech design spectrum would the level of improvement be proportional to the increase in material costs. After that, the law of diminishing returns came into effect. Improvements became increasingly harder to achieve without spending a fortune.

In practical terms, an absolutely trashy mech that cost 3 million credits in raw materials to produce could be twice as good if the cost of materials was 6 million credits instead.

However, if a mech that cost 45 million credits got overhauled with materials that cost 90 million credits, the actual rate of improvement might only be around 10-35 percent. The range was rather large because it heavily depended on the skill and vision of the mech designer.

However, the point was clear. Every mech outfit or mech regiment needed to find a balance between their income and expenditures. Spending lots of money and resources on expensive mechs might sound good, as they often lasted longer on the battlefield, it might not be able to make up for the huge upfront costs.

The calculus that Professor Velten performed had led the 6th Flagrant Vandals maintain the current design of the Inheritor in its current state. Regardless of its performance, it was easy to fabricate from cheap exotics that were abundantly available from the market and lots of mundane materials that could be mined from practically any asteroid in any desolate star system.

Ves estimated the market price for the Inheritor at around twenty million credits. This didn't sound so bad. The Vandals basically substituted the role of frontline mechs to the Inheritor.

Yet no one ever complained about frontline mechs. In exchange for chopping off some limbs or even the heads of these mechs, they piled up on lots of cheap armor and slapped some gun barrels on it to make them effective at range. Although the abundance of armor didn't protect the mech all that well and slowed it down for quite a bit, as long as they stayed at range, the mechs would not be exposed to too much risk.

It was different for the Inheritor. The only thing it had going for was speed and acceleration. Besides that, it possessed no range at all, forcing the mech to close in to knife fighting distance in each engagement. The Vandals needed to commit the Inheritors in a single go, which was very risky as complications constantly happened on the battlefield.

All of these concerns passed through his mind in an instant. While Ves sympathised with Lieutenant Chandis and his men, Ves too needed to think about the big picture. The big shots evidently decided that they would rather sustain more losses in mechs and lives than to invest in upgrading the much-maligned design.

"I will see what I can do, lieutenant." Ves answered vaguely when Chandis expected a response from him. "Your concerns are being noted."

He felt like this liaison gig wasn't as important as he hoped. Sure, he got to see more of the Vandals, but if he constantly ended up in situations like this where he wouldn't be able to make people's problems go away, then it was difficult for him to feel happy about it. The Inheritor design was a light skirmisher that was built to be cheap. Ves could find no leeway in meeting any of the demands set by Chandis.

Nevertheless, he dutifully toured around the hangar while Chief Carmon showed him around the place. Ves spoke with a few other mech pilots and heard the same complaints. This time, he changed up the conversation a little. He heard more than enough bad things about the Inheritor. He wanted to know what made this design so important to the Vandals.

"Well, I gotta admit one thing about this mech." The mech pilot explained as he stood in a straight posture in front of his mech. "It teaches you how to pilot a melee mech in space. There's no substitute to actual battle experience. No matter how much we trained in the academy and during boot camp, there's always the realization that whatever simulations we are in is fake. Only with our backs against the wall will we be able to see if we measure up as a Vandal."

Ves thought that these words carried a lot of weight in the Vandals. Even though he hadn't spent too much time with the mech pilots, he spotted a subtle but pervasive division between mech pilots who used the Inheritor to those who used the other models.

They were rookies.

They mostly consisted of inexperienced mech pilots who had been banished to the Vandals for some reason or another. Piloting this death trap of a mech seemed like a reckless and wasteful decision as it played fast and loose with their lives, but the incredible amount of pressure they endured also seemed to polish off their rough edges.

Those that had spent a longer time with the Inheritor behaved more mature in front of Ves, while those who only transferred in a couple of months ago still exhibited problematic behavior.

One guy happened to be extremely aggressive.

"Piss off!" A man younger than Ves snarled when they approached. "I don't want to talk to stupid techies like you!"

Ves frowned. "I'm here to ask some questions. What is your problem?"

That really riled the mech pilot up. He jumped to his feet and approached them with his fists. "My problem is that I don't like your face!"

Before Ves could do anything, Chief Carmon moved with confident ease and thumped the man onto his butt with the swing of her multitool.

"Knock it off, brat! We don't tolerate roughhousing like this around here!"

The casual way in which Chief Harmon dealt with the aggressive mech pilot spoke volumes to Ves. He got the sense that outbreaks like this happened plenty of times as mech pilots unwillingly transferred into the Vandals.

While Ves wasn't in the mood to talk to a mech pilot who wanted to punch him in the face, he had a duty to fulfill. He put down his animosity and asked his perfunctory questions.

"What do you think about the Inheritor design?"

"It's dangerous. Spaceborn mech battles may revolve around speed, but there are many instances where you can't dodge everything that comes in your way. This stupid mech completely ignores that possibility. Do you know how this model got its name?"

"No. Do tell, please."

"Word around here is they're called that way because their designers hope the mechs last long enough to be inherited by my children. Hahaha! As if they will last more than a year during wartime!"

Ves didn't know if this was true, but he doubted it. Up close to several Inheritor mechs, Ves could feel the intangible echoes embedded into the

frames. These mechs had been designed from the onset to be disposable products.

Of course, they should last long enough to provide enough of a return on investment to the Vandals, but beyond that nobody cared if they got wrecked.

The Vandals would mourn if a single Hellcat got destroyed. Partially due to the enormous cost in fabricating a copy, but also due to its symbolic value.

In comparison, the Vandals wouldn't blink at all if they lost ten Inheritor mechs in a single fight. That was just the cost of doing business. As long as the Vandals got more in return, the damage was negligible.

Evidently, this newcomer knew this and vented out his frustrations. "They sent me out to die here! I'm a medium mech pilot. There's no way I can master a light mech so quickly! They purposely put me here to kill me."

Chief Carmon couldn't restrain from whacking the mech pilot over the head with a light tap of her tool. "Nonsense! Larkinson, don't listen to this lad. He's just angry at himself for screwing up at his old posting. There's no way we would drive our own mech pilots into a corner."

That was true, in general. A mech pilot that loosened his restraints could be a very dangerous person. The amount of damage he could inflict when he stepped inside a mech was gigantic.

Ves actually expected the Vandals to deal with this problem already, but they let the crew and mech pilots talk smack all day. It was as if they didn't care.

Maybe the young man's words hid a kernel of truth. Did the Vandals accept every type of person the Mech Corps threw at them with open arms? With the wild personalities these troublemakers possessed, not everyone would mellow out during their stay here.

Ves felt obliged to speak some words of defense. "This isn't the best mech model that came into existence, but let's not exaggerate things here. As long as you aren't too unlucky, you'll be able to survive inside the cockpit of an Inheritor."

Talking with the mech pilots left him with a whole bunch of negative opinions to sort through. Ves didn't leave it at that and also began to question the various mech technicians in charge of defending the factory ship.

One of them was an older man, and he used to be a mech designer in his early years of adulthood. He hadn't been able to make it on his own, so he tried to find some meaning in his life by serving in the Mech Corps.

Someone with a background in mech design possessed a lot more insights on the nuances of a design than outsiders. "The Inheritor is not a difficult design to maintain. It's actually very ease. There's one downside to this mech that I'm a little more dubious about."

"What is that?" Ves said as he leaned in.

"The Inheritor seems like a derivative of a better design. A greater design. Perhaps even an elite one."

#### **Chapter 443 Lack of Appreciation**

The old mech technician's claim sounded very absurd to Ves. Perhaps the reason why this fellow hadn't made it as a mech designer was because he constantly came to weird conclusions like this. How could a design of a disposable mech like the Inheritor be a variant of a high-end mech design?

Ves turned to Chief Carmon. "Have you ever seen a superior version of the Inheritor?"

"Not even close." The chief shook her head. "I've been a Vandal for over twenty years and been posted on more than eight different carriers and I've never seen any other version of the Inheritor than the one we're currently

looking at. I know this model like the back of my hand and there's no tolerance for improvement besides using better materials."

That caused Ves to look at the frame of the Inheritor in a different way. The design might not be all that good, but what would happen if he replaced the low-quality materials with better ones.

He performed a brief visualisation of the result. His conclusions led to the a similar route to the road that his Crystal Lord design had taken.

"What is the Inheritor design is clad in compressed armor?" He asked. "The main advantage of the Inheritor is that it's fast even for a spaceborn light skirmisher. The downside to that is that its armor is extremely flimsy. Replacing its lightweight armor with compressed armor plating will substantially negate this disadvantage."

"That's exactly right." The former mech designer said. "You can also replace the core parts with better versions."

It would be a completely different design. The performance of such a machine would be a multitude of times more effective than the cheap hunk of alloys the Vandals relied on as one of its workhorse models.

Yet none of it mattered.

"This design you're describing doesn't exist." Ves said. "Not if what Chief Carmon said is true. It might be that the original designer had a quality mech design in mind when he originally developed a premium mech, but he never made it into fruition. Afterwards, when the Vandals commissioned him to design an affordable light skirmisher for space battles, he must have recycled some of his old work."

Every mech designer created more designs than they could put to use. They usually archived their unused designs and utilized some of its elements in other projects to cut save a lot of time and effort.



The more Ves thought about it, the more this conclusion resonated to him. Maybe that was why the Inheritor was a little unsuited in its role as a disposable mech.

"It sounds possible, but without any proof, we're guessing in the wind. Besides, even if it turns out to be true, that doesn't make this model any better."

Ves wanted to get the conversation back on track. He steered the conversation away from baseless speculation and turned back to his original job of gathering feedback on the Inheritor mech.

He didn't learn much new after talking with all of the mech technicians. Sometimes, they described some problems concerning the difficulty in assembling or repairing certain sections, but fixing those issues required a lot of time and didn't measurably strengthen the mechs at all.

Still, in the back of his mind, Ves could fathom the reason why the Vandals possibly utilized a heavily downgraded version of an excellent design. It made no sense. Someone as skilled as Professor Velten or any of the Senior Mech Designers that used to work for the Vandals should have been able to design an optimal spaceborn light skirmisher from the ground up.

Ves left that question to the side and concentrated on his work. He also didn't forget about observing his surroundings. He hadn't forgotten his earlier desires to figure out what made the Vandals tick.

At the end of the day, Ves returned to his cabin and summed up the feedback he received in a bland report. Ves didn't focus too much about what he put into words because they mainly echoed all of the existing problems known by the design department.

Instead, he focused on his other observations.

The main takeaway from his walk around the ship was that the Vandals acted with less discipline than they should have behaved, but they made up for it in their sense of unity and their trust in their leadership.

Besides the malcontents who piloted the Inheritor, everyone else displayed no displeasure at being assigned to one of the least desirable mech regiments of the Mech Corps.

"The Vandals maintain a true esprit de corps."

This identity that set them apart from everyone else lifted their hearts and gave them strength. Ves had seen similar beliefs in outfits like Walter's Whalers. Their esprit de corps arguably made them fifty percent stronger, if only because they wouldn't cut and run at the first sign of trouble.

This strong collective belief made it even stranger that it did not extend to the pilots of the Inheritor mechs. Their relationship to the Vandals was akin to the status of Pierce and Laida in their design teams. As temporary workers, they would only stay for a stint or two before being assigned somewhere else.

The difference between the two situations was that mech designers transferred away in peace, while the mech pilots most often had had to pay for their lives.

The possible kept nagging at Ves to he called to Laida for them to meet at the canteen.

When he arrived at the place, he ordered a quick coffee and some snacks and sat down on the opposite of Laida. The young woman looked tired.

"Did I call you up when you were about to go to bed?"

"Yes."

"I'm sorry about that." Ves sheepishly scratched his head. "I didn't think about the time."

"It's fine. You wanted to talk about the Inheritor, right? I've been having many restless nights due to this design. It doesn't make sense."

Laida spoke about some of her issues. Different from what the mech pilots brought up, she addressed more technical issues.

"The root of the problem lies in the demand that the Inheritor has to meet a standard in terms of speed and acceleration. This is forcing us to design the Inheritor as lopsided as possible to accommodate these wishes. It's the entire reason why its flight system is rather overpowered for a design of that stature, and why we don't have any weight capacity left to thicken its armor. They're asking us to do the impossible, so we only delivered half of what was promised and forgot about the other half."

"So you believe it's not a deliberate choice to make the Inheritor so fragile?"

"Not really." Laida replied after a momentary pause. "It's due to helplessness from our design team, mostly. Did you know that in the last twelve months, we've only been able to increase the durability of the Inheritor by two percent? That's miniscule!"

A two percent increase in durability without resorting to more expensive materials was an impressive achievement depending on the starting point of the design in question.

Increasing the toughness of a heavy mech by two percent meant that it could withstand a lot more firepower in absolute terms.

Increasing the toughness of a thin light mech by the same proportion hardly made no difference at all. It wouldn't even let the mech endure one additional ballistic rifle shell.

So the progress the Inheritor design team had made over the past year really amounted to squat. "Has all of the potential in this design been exhausted?"

"As I said, it's mainly because of orders from the top that we can't improve this design. If you ask my entire design team, they'll say that the Vandals should have switched over to a different design a long time ago."

As Ves discussed the issues of the Inheritor design a little more, Ves increasingly got the suspicion that the Inheritor was indeed derived from a better design. Ves still didn't know the reason why, but he increasingly believed that this was a deliberate choice from Colonel Lowenfield or Professor Velten.

There was something more at stake behind this seemingly inane choice to stick with the Inheritor design.

After finishing the meeting and letting Laida return to bed, Ves retired for the night and returned to work the next day. His new assignment didn't entail documenting the same old complaints by the mech pilots. The professor tasked him with coming up with concrete improvements in the designs the Vandals developed on their own with the help of his unique strengths.

Ves had no clue how to do this after hearing about the awful state of the Inheritor.

"The Hellcat and Akkara designs are a mess, but at least they have a lot of room to improve. The same can't be said about this stupid piece of junk."

As Ves made his rounds to the other hangars of the Wolf Mother, he heard the same things over and over again. It really made him question Lowenfield and Velten's sanity for persisting with this inadequate design.

Not that any other light skirmisher would do much better, but with a minor bump in cost, the longevity of the mech would increase by a significant amount. Ves found it strange that the Vandals refused to accept this generous trade-off. After all, the law of diminishing returns didn't bite so hard at the start of the curve.

While his prospects of coming up with effective solutions diminished, he at least tried to do his best. Ves particularly took advantage of his freedom of movement to stroll through as many ship compartments as possible as he passed from hangar to hangar. He got to see how every other section of the factory ship looked like and how many people worked to keep the mech regiment running.

It humbled him in a way. He passed by a lot of enormous machines the size of a couple of mechs jumbled together. The scale of these machines caused him to fall into an illusion that it wasn't the Vandals driving the Wolf Mother, but it was the Wolf Mother dictating the actions of the Vandals.

Ves shook his head. "What kind of nonsense is that?!"

He quickly turned back to his work. As Ves met with many mech pilots and mech technicians and personally performed a deep inspection of a disassembled Inheritor mech, Ves continued to perceive the intangible qualities of the Inheritor.

"Too bad it's hardly there."

These mechs had never been truly valued since their conception. Their designers intended for them to last a couple of years at most, while the Vandals obviously didn't take any special care of them despite fielding them by the hundreds.

This led to the formation of dead or stunted spiritual existences within the mechs. With hardly anyone showing any care for these mechs, it was no surprise that they couldn't fully mesh with their mech pilots.

Most of the mech pilots Ves had questioned described the piloting experience in awful terms. One mech pilot described it as landing on a bed of nails, trying to flail your limbs in order get out, only to suffer more injuries as a result.

"Maybe that description is a little too extreme."

After experiencing so many Inheritors through sight and touch, Ves realized its design failed to live up to its promises due to a common thread.

The Inheritor was unloved.

Seemingly no one appreciated this design. Its designers regarded it as a throwaway mech. The technicians who fabricated it en masse tried to rush the work as fast as possible. The mech pilots who had been assigned to pilot these death traps all hated spending one more second in its cockpit than was necessary.

Ves honed in on this observation and thought that this might be the opening he was looking for. Could he turn this difficult and unloved design into something that people could be proud of working with?

#### Chapter 444 Stairs

No one appreciated a light mech except for light mech enthusiasts. It took a special kind of mech pilot to truly enjoy the rush of speed, even if it meant sacrificing a lot of personal protection.

The reason why Ves stuck to a medium weight class for his Crystal Lord design was because he did not wish to narrow its potential audience any further. An overly narrow mech design might not face much competition in its niche, but it would also be destined to obscurity.

The main issue at play with the light skirmisher archetype was that its effectiveness drastically different on land, air and space.

Light melee mechs saw the most use in landbound mech combat. Combat took place in smaller areas and mechs on land moved slower and their weapons exhibited many restrictions in range. This allowed light mechs to approach their landbound prey with ease by taking advantage of the natural cover of the terrain.

Spaceborn combat stripped most of those advantages. Terrain on land was often complex, while space was literally and empty void. Light mechs would be as bare as as they were born if they flew through this completely open space as they approached their targets.

The effectiveness of this mode of combat could be imagined.

Granted, many battles in space occurred in slightly more complex environment. Only rarely would two enemy forces meet in the middle of empty space. Most of the time, a mobile force attacked a static position, such as a mine or a space station. These fixed features afforded light mechs with sparse but effective cover.

Nevertheless, it would usually be the defenders taking advantage of available cover. This protected them from ranged fire and forced the attacking force to enter their kill zones.

Reading through the summaries of the various battles the 6th Flagrant Vandals had fought, most Inheritors met their end in this way. "Shot down in the process of closing the distance."

It was an ignoble end to any mech. Sometimes, the Vandals were obligated to attack a well-defended position. They possessed a number of knights that could absorb a decent amount of blows, the Hellcat being the most prominent one, but a charge needed to be supplemented by as many mech frames as possible in order to spread the incoming fire.

In these cases, the mech commander in charge of the assault would always accompany the knights with a horde of Inheritors. Despite being one of the most fragile punching bags in space, the Vandals evidently had no qualms in employing them as cannon fodder.

When Ves met with Laida again during lunch and told her his conclusions, she shook her head in sadness.

"It's horrendous." She spoke with a whisper. "The longer I stay in the Inheritor design team, the more I realize that none of them care. The only mech designer who still cares a bit is the temp from Rittersberg and myself, but we are growing number every day. It's hard to prioritize decency when we are faced with constant demands to increase its cost-effectiveness."

"I thought your design team isn't making much progress these past few years."

"That's not exactly right. It's true that we haven't been able to increase the Inheritor's performance parameters, but we did manage to shave off ten percent of its manufacturing cost in that time. Most of our efforts are spent on achieving as much cost savings as possible as opposed to actually improving the design in battle."

That sounded really crazy to Ves. The Vandals spent an enormous amount of money and resources keeping everything running. He could certainly understand if they needed to be frugal with their spending, but cheapening an already barebone mech design even further was basically starving their own hunting dogs.

"That sounds like your design team is trying to creatively cut as much corners as possible. There's no way the structural integrity of the Inheritor design can be maintained."

Laida nodded grimly. "It's a tradeoff. If you can reduce the cost of the frame by one percent by substituting one material for another, you would accept it as long as it won't weaken the mech too much. In this case, as long as the mech won't weaken more than a tenth of a percent, the design team will accept the change with open arms."



In other words, the Inheritor design had most likely weakened over time. A performance decrease of a tenth of a percent didn't sound so bad, but its design team constantly applied new solutions.

A tenth of a percent turned into a half percent. A half percent turned into one percent. One percent turned into two percent.

This slide in performance didn't happen fast enough for the mech pilots to notice, but that didn't mean it was negligible. The effectiveness of the Inheritors would continue to decline and their mech pilots risked dying even faster.

The Vandals was like an abusive parent to the Inheritor design. Even as they made use of it, they constantly talked it down or starved it in order to save on costs.

Although Ves did not understand the priorities of the higher ups, he believed that their entire approach to the Inheritor design should be upended from the ground up. Rather than approach it from a perspective of reducing its burdens, they should instead seek to increase its value.

When Ves laid out his suggestion to Laida, she did not seem very hopeful at his suggestion.

"The Inheritor design doesn't have much of a future in my eyes. All the low-hanging fruit has been plucked, so it's nearly impossible to increase its parameters without increasing its cost or adding more weight and space."

"I think a change in perspective is still necessary. Your design team has been seeking ways to cut its cost for so long that they forgot to do anything else. If it were up to me, I would have expanded the cost allowance by five percent or so in order to get them to start thinking into the other direction again."

Laida remained skeptical. She believed that the Vandals couldn't be shaken out of their established impressions of the Inheritor design.

Ves wasn't willing to settle this issue like that. So when he returned to his office, he compiled a report and sent it to Professor Velten. He also scheduled a meeting with her in order to explain his thoughts in person.

He got to meet her later in the day. As he entered her office and sat down on the other side of the desk, he looked at Velten and tried to figure out if most of the demands on the Inheritor had been imposed by the Senior Mech Designer.

Though she looked like an old lady and her mind wasn't as agile as before, she still radiated a faint sensation of solidity. It was as if Ves faced a slab of compressed armor instead of a fragile human being.

The Senior Mech Designer took no note of Ves when he entered. Instead, she fixated her attention on an unknown component design projected from her desk terminal.

Ves curiously glanced at the part and tried to figure out what it did. It did not resemble any of the standard mech parts such as an engine or power reactor. His long-buried Signals and Communications Skill started to rouse itself from its sleep after he tentatively identified some sub-components that had to do with sending and receiving signals.

If he had to make a guess, Professor Velten was working on a supersized transceiver customized for a very specific design. At this power and size, the transceiver should have no problem communicating through long distances and strong jamming.

He guessed that Velten was preparing this transceiver for the upcoming grand raid on the Imodris Duchy.

"Ah. Mr. Larkinson. You are here now. Good." She spoke as her head abruptly shifted upwards. She waved a hand which winked the projection out. "I have been anxiously waiting for you to report back on your progress. To my

surprise, after an entire week, the only points of note in your reports are rehashes of old problems and a rather ludicrous suggestion that we should shift our paradigms concerning the Inheritor design."

Though she sounded harsh in her judgement of his work, Ves did not immediately concede. He did not wish for his report to be filed away and forgotten by all. He strongly believed that the problems he documented and the solutions he proposed would measurably strengthen the Vandals.

"Professor, forgive me for being somewhat blunt, but the Inheritor mech has long been stagnant as an actively developed design. Hardly anything improved except for its cost efficiency, and you know as well as I do that these cost savings came at a cost. The war we are waging against the Vesia Kingdom won't end until a few years later. If the Flagrant Vandals intend to depend on the Inheritor design to carry them through the next five years, they should invest in making it stronger, not weakening it any further."

The professor looked at Ves with a small frown. She tutted at Ves and knocked her desk with a finger. "Let me ask you something. Do you know how much credits it takes to support an entire mech regiment?"

"I'm sorry, ma'am. I don't have a clue."

"There are many costs associated with running a force of over two-thousand mechs and all the logistics necessary to maintain them and to convey them across the stars. Fuel, salary, maintenance, replacements and more all form a persistent drain on our finances."

"Yet the Hellcat and Akkara designs are both expensive and extravagant in terms of features. From my time in the Hellcat design team, I've noticed that everyone is constantly working on squeezing out more performance out of the hybrid knight. They might not always succeed, but they always strove to climb

the stairs. It's entirely different for the Inheritor. Everyone is walking backwards, going lower and lower until eventually they reach the ground."

The analogy succinctly illustrated his point. Ves just hoped that Professor Velten would be swayed by his argument.

Unfortunately, her face remained impassive. "The Hellcat and Akkara designs fulfill a very different role in our mech lineup. These mechs carry a substantial amount of armor and their longevity is great."

In other words, even the professor treated the Inheritor like dog poop.

"I think it's a disservice to the Inheritor design if we think of it as a burden." Ves emphasized. "I am aware of the costs involved with improving the quality of this design, but I really think it is necessary to do so, ma'am. Just give it a chance."

"No."

"Uhm, pardon me?"

"Nothing of the sort will be done." Velten spoke with finality. "Though I can see the merits in your unique perspective, that doesn't outweigh the priorities of the Vandals and the mech Corps. There is no leeway in this matter."

Ves continued his attempts at persuasion, but got rebuffed by the professor each time. He started to believe that Velten did not hold any decision-making power on this matter. She never relented on the expectations she had set on the designs she supervised.

The issue ended without any changes to the policies set by the Vandals. Ves was deeply disappointed at this outcome. It made him feel as if he wasted the entire week.

"Perhaps it is a mistake to assign the Inheritor under your supervision. It is a very complex design that is bound to many goals." She thought of something

else. "Perhaps you could need a break. It just so happens to be that we will soon be transitioning out of FTL to meet with a delegation of the Vesian Revolutionary Front. One of the terms of our deal with them is that they commit their own mechs to our forces. I'd like you to join Alloc as he studies their designs."

His eyes began to shine. "I'll do my best, ma'am."

After wasting his time on the Inheritor, Ves deeply wished to experience something else. Meeting the Vesians and studying their mechs up close sounded just the right kind of thing to distract him from his failures.

He also wanted to see for himself how chummy the Flagrant Vandals and the Vesians rebels acted in each other's presence. Did they consider their cooperation a necessary evil, or was there something more behind this scheme?

#### **Chapter 445 Vesian Revolutionary Fron**

"Have you met with these Vesians before, sir?" Ves asked as innocuously as possible as he adjusted his formal burgundy uniform.

The 6th Flagrant Vandals regimental colors consisted of wine-red and black, though they mostly wore black uniforms in their day-to-day duties. The formal uniform that Ves just received would only be worn in their first meeting with the rebel delegation. After all the of the pomp and ceremony scheduled for today had passed, Ves would return to his standard dark green working uniform.

"We've had dealings with the VRF before. A lot of Vesian rebel movements are localized on a single planet. The bigger players only span the range of a single duchy at most. Culture and customs differ a lot between different duchies, so it's hard for these rebel groups to find any common ground with each other. The Vesian Revolutionary Front is one of the few exceptions to this rule."

"Are they the most powerful rebel group in Vesian space?"

"They're not. In fact, groups that span a single duchy can easily mobilize ten times as much mechs and sympathisers than a broader movement like the VRF. They're too bland and distant in the eyes of the rebels on the ground."

"Then what makes them so valuable to us that we have to greet them with a formal ceremony, sir?" Ves asked with puzzlement in his voice.

"Just because the different rebel movements don't agree on many matters doesn't mean that they ignore each other. Sometimes, they want to trade a resource their duchy has in abundance with another resource that can't be sourced from the same region. To facilitate this kind of trade in a completely lawless underground setting, a trustworthy intermediary is needed."

Ves got it now. "Ah, so the VRF have profiled themselves as bridge builders that can connect different groups together, but only to the extent they are comfortable with. I imagine one of the reasons why they can engender trust is because they aren't big enough to threaten the position of these regional rebel movements."

"Exactly so." Alloc nodded as they began to move through the corridors.

"Regional rivalries exist in any states, but it's magnified to an extreme extent in the Vesia Kingdom. Nobles fight against nobles and it's not unheard of for the rebels that exist to overthrow them to get into feuds as well. It's like internal conflict is baked inside their DNA."

That only made it more admirable for the VRF to stay above the infighting. "So if they aren't very strong, why are they sending their own mechs to us?"

"It's one of the demands that Colonel Lowenfield has set. Though we've always cooperated with each other without issue, there's always the possibility that they might stab us in the back. Hosting some of their assets aboard our ships will guarantee us against betrayal."

"So they are hostages?"

"You can look at them in that way, yes, but they are our guests as well. We've done well with the help of the FRF so it's important to treat them cordially at all times. They'll mostly stick to themselves so you won't have to be afraid of starting any incidents with them. Just don't ask them why they joined the VRF. The reasons are often traumatic."

The pair of mech designers in burgundy spent a few more minutes traversing the corridors in silence. Due to the size of the Wolf Mother, it would take them at least fifteen minutes to arrive at their destination on foot.

A proper capital ship incorporated several aids to get people to their destination faster, such as internal trains or lifter platforms. Unfortunately, the Wolf Mother's ad-hoc expansion hadn't taken these conveniences into account, and employing devices like lifter platforms posed a potential security risk.

Thus, Ves and Alloc had no choice but to trudge their way down the decks and towards the sides of the Wolf Mother. Walking through her cavernous depths gave Ves the illusion that he was descending into the belly of the beast.

"How are you holding up in your new assignment, Ves?" Alloc asked.

"Not very good." He replied honestly. "I haven't been off to a good start. Try telling Professor Velten that the development on the Inheritor design needs to undergo a U-turn."

The Journeyman Mech Designer chuckled. "I can imagine why you would suggest that. It's not the first time such a suggestion has been bandied about."

"If the same suggestion has come up before, why is no one taking it seriously?"

Alloc sighed. "Because it's about money."

"Everyone always tells me that the Vandals are short on money, but how could they? They have the Wolf Mother! That's a portable mineral processor and mech factory! They can easily generate a lot of income by fabricating and selling a lot of mechs."

"It's not so simple." Alloc shook his head. "First, the Mech Corps isn't allowed to enter the private market. It would open up a lot of can of worms if economic interests started to interfere with purely military interests. Second, let me fill you in on a secret."

What secret did he refer to?

Alloc leaned close to Ves and whispered something in his ear.

"The 6th Flagrant Vandals is heavily indebted. I don't have an exact figure, but my estimates is that the Vandals owe around 200 to 400 billion bright credits."

Ves almost tripped when he heard that enormous sum. "Billions, sir? Not millions?"

"I didn't misspeak. It's billions of bright credits. Yet that's not the most frightening thing. The question you should be asking is who the Vandals borrowed the money from. I can tell you one thing. It's not the Mech Corps. They wanted to cut off the funding for the Vandals in the first place, so there's no way they'll even consider extending loans to us."

All of this information caused him to remain off-balance. What was wrong with the Vandals? Was a mech regiment of the Mech Corps even allowed to take out a loan?

"Sir. Are the Vandals still leaking out money?"

"Yep. It's a waterfall. Even after we got rid of our fleet carrier and built up the Wolf Mother, we still can't break even. You have to realize that raiding Vesian



space isn't actually profitable for a mech regiment of our scale. Pirates don't suffer the same problem because they're mostly running a handful of ramshackle ships and crumbling mechs. They hardly spend anything to keep themselves afloat. It's different for us because we're bigger and we have quality standards."

"Even if the Vandals are heavily indebted, slimming down the Inheritor won't necessary save a lot of money. I would argue that it actually increases the costs, since they get wrecked so often."

"Professor Velten doesn't think so. As I mentioned before, she has performed a whole raft of calculations that sets the Inheritor's current cost picture as its most cost effective position. The mech is strong enough to last a while but cheap enough that it won't hurt that much if we need to replace a copy or two."

"Still, the Vandals would only save a hundred million credits or so over an entire year. The costs savings doesn't seem to be worth it if it keeps weakening the design, sir."

"Just because the Vandals have accumulated a mountain of debt doesn't mean we are eager to raise it even higher. The main reason why we haven't been able to break even is because there's hardly any profit to be made in times of peace. If the war hadn't erupted by this time, the Vandals would have truly been forced to disband."

Ves looked at Alloc with an amazed expression. "Does that mean this upcoming raid is motivated by money?"

"Exactly." Alloc replied softly. He leaned in again to whisper something else. "I can't tell you our target, but you can bet it's a highly-populated star system that holds a lot of advanced industries. As long as we can rob it blind, we can take a huge chunk out of our debt off the table."

What Alloc revealed to Ves was a revelation. He hadn't fully appreciated how bad their financial situation affected their daily operations. Even as they showed off a lot of outward strengths, internally they barely made ends meet."

It became clear to him that the Vandals stakes a lot more than he thought on the upcoming raid. The outcome of this ambitious operation might very well decide whether the 6th Flagrant Vandals remained afloat or be swept away in the annals of history.

They finally reached their destination after another bout of silence. Heavily armored security officers dressed in dress garb or fully-enclosed exoskeleton suits checked them for any threats.

After confirming security that they were harmless, Alloc and Ves went through the armored hatch and entered into the largest hangar of the Wolf Mother. They joined a group of neatly-dressed servicemen standing in rows.

They didn't have to wait for long for their guests to arrive. A dozen mechs along with two sturdy military-grade shuttles flowed in from the hangar doors. They carefully settled down in the hangar set aside for them. The Vandal mechs that used to occupy this space had been transferred to another ship in the fleet.

They settled down one by one according to invisible instructions. The mechs arrived with their weapons bearing obvious seals, not that it would stop them from accelerating into the waiting crowd and stomping them all to muddy bits with their feet. That was why the really important Vandals such as Professor Velten or Colonel Lowenfield had been left out of the greeting party.

Instead, some captain Ves had never seen before led the delegation from the Vandals.

A few minutes later, the shuttles opened their hatches. A handful of formally but soberly dressed men and women emerged out of the Vesian shuttles, accompanied by a small host of lightly armored guards.

The makeup of the Vesians largely matched the delegation from the Vandals, only with much less people. It was as if both sides had agreed to send somewhat important people but not the truly indispensable ones from their organisations.

To Ves, such hedging defeated the purpose of taking hostages. Would the VRF truly care if the Vandals pulled out their guns and shot the Vesians dead before they could utter a word of protest?

"Mr. Meffeth!"

"Ah, captain, it is good to see you again!" A jolly-looking fellow greeted their captain with a bear hug. "It is my pleasure to be aboard your fantastic factory ship again."

Mr. Meffeth smiled and glanced at the rest of the welcoming party as some musicians started to play a martial tune. "Very uplifting. I hope to see our latest cooperation to proceed in the same vein."

The captain laughed and pulled Mr. Meffeth by the shoulders. "With the help of your connections, I'm sure we'll both profit handsomely."

Ves listened carefully as the two leaders spoke about matters beyond what he should know. They never went into specifics, probably due to how many people had gathered here, but what little they revealed was very valuable in confirming what he had guessed beforehand.

Even as his ears stayed open to pick up the useful facts from the litany of empty platitudes, he scanned his eyes over the other Vesians who came out of the shuttles.

The majority consisted of friendly-looking men and women in their forties or fifties. Despite their drab uniforms, their posture and composure reminded Ves of diplomats or traders rather than partisans who eked out a marginal existence. They must be earning well for themselves as a mediator between different rebel movements.

Only a handful of Vesians carried themselves differently. Besides the guards and the obvious military types, the Vesians brought three people who all carried themselves in the same manner as Alloc and Ves.

The Vesians brought their own mech designers. And they all happened to be women as well. One older woman stood over a pair of curious-looking young women. The matron must be a Journeyman while the younger women must be Apprentices.

All three happened to be pretty as well in different ways.

#### **Chapter 446 Three Ladies**

The welcoming party held a banquet for the visiting representatives. Though the Vesian Revolutionary Front ostensibly resisted against aristocracy and the excesses associated with them, they weren't strangers to the finer things in life.

The Flagrant Vandals pulled out a lot of stops to impress the newcomers. The dining hall was situated at the top decks that encompassed a massive transparent dome from above. Ves saw unknown stars and unknown ships orbiting around the Wolf Mother. He also spotted the red dwarf, but couldn't determine where they were in Vesian space.

"To my friend, let us toast!"

"Haha!" Mr. Meffeth blustered. "You always bring the finest wines from Rittersberg!"

For a mech regiment deep in debt, they sure held little back for this occasion. Ves recognized several exclusive dishes that must have cost a lot of credits to acquire. The cloud rice from Cloudy Curtain, the luminescent blue mushrooms from Bentheim, the finest red wines from Rittersberg and the aeliotonoc whale meat imported from Moira's Paradise served to everyone present could have afforded half an Inheritor mech.

The sheer amount of waste really boggled his mind. Though Ves lived a lot easier when he started earning loads of money, he didn't spend his money on frivolous and temporal luxuries such as good food and wine. He was way too busy to slow down and appreciate the finer things in life. Ves regularly ate simple meals reconstituted out of cheap nutrient packs.

"Alloc, who is this young gentleman over here?" The mature-looking woman asked as she daintily played with her salad.

"This is Ves Larkinson, an Apprentice who has just arrived at the Vandals a couple of months ago. He's very bright and has unique talents."

"Unique you say?" Florissa Minyn drawled out as she twirled a finger. Her eyes glazed over to Ves and he could feel the curiosity bursting out from them. "Are you talented in many areas?"

Ves awkwardly smiled. "Alloc is exaggerating. I've only entered the industry for a few years."

"Ves doesn't have much practical experience, but he's good with theory and he has a special touch for improving the piloting experience. His customers back home are rabid fans of his work!"

That caused the other two girls to glance over in his direction. A blonde who introduced herself a little earlier as Iris Jupiter asked another question.

"So you're an entrepreneur in the Bright Republic? How many mechs have you sold?"

"I don't keep track of the exact figure. If I include the sale of mechs from third-party manufacturers that have licensed my design, then it should be around three-thousand to five-thousand mechs I think."

If Ves only took the sales figures of the LMC into account, the number would look much less impressive.

All three women looked mildly impressed. The other girl, a raven-haired woman called Lucille Hornbach blinked at him as if he was an alien.

"That's impressive, Mr. Larkinson! You must have earned an enormous amount of bright credits! Why are you even here?"

Florissa quickly bumped Lucille with her elbow. "That's not very polite!"

"Sorry!"

"It's okay, Miss Hornbach. I have nothing to hide." Ves smiled at them, even though he just said a big fat lie. "My history is a little complicated. I'm apprenticed to Master Carmin Olson. Even though I've only received a few pointers from her so far, it inevitably casts some doubts on me. I don't blame the Mech Corps for pushing me away from the frontlines."

None of the Vesian mech designers cared about that. Their eyes practically sparkled as soon as he mentioned his Master.

"You're apprenticed to Master Olson?! The genius that rose up from the Vermeer Group?!"

"Yes. That's the one."

The two girls squealed in unison in a stupendously high pitch, causing conversation nearby to be disrupted. Florissa embarrassingly hushed the two girls and waved at everyone to turn away.

"We are not aboard our own ships anymore. Pease show some more decorum!"

"Sorry, auntie Florissa." Both girls apologized while hanging their heads in a glum manner.

Their casual attitude seemed completely unlike most mech designers he had met before. If no one told him that they knew how to design mechs, Ves would have mistaken them for teenagers barely out of school.

Both of them looked pretty and young that spoke of exquisite care in their appearances. While this was normal among the young elite, the girls behaved in a somewhat carefree manner. It made Ves a little confused. Were these people even rebels? He previously imagined the resistance members living aboard shambling starships and barely having enough funds to make ends meet.

Evidently, the delegation of the VRF showed no signs that they suffered any hardships. Mr. Meffeth spontaneously held a drinking contest with the captain from the Vandals while the three women charmingly kept the conversation with Ves and Alloc running.

They quickly moved to a first-name basis, which wasn't unusual for someone from the Bright Republic but was highly unusual in Vesian culture.

"Florissa, how are your designs doing in the VRF lately?"

She smiled at Alloc. "I am doing very well so far. Although I have not published any new designs by myself, all of the collaborative project that I'm involved in has been spread to the entire organization."

"How big is the VRF?" Ves asked with genuine puzzlement. Sometimes, he had the sense that the VRF was a behemoth, but other times it was a medium-sized organisation that had been stretched out to cover the entire Kingdom.

"We're not allowed to tell you the exact figures, but it's safe to say that we can give a couple of mech divisions from the Mech Corps a run for their money."

That wasn't enough to overthrow an established Vesian duchy, but it would certainly be able to cause mass disruption if the VRF deployed them all at once.

Naturally, Florissa could have lied about their strength. Ves thought that an all-encompassing organization like the VRF should have had a few tricks up their sleeve.

Not that it was any of his business.

"What are your specialties?"

"I am a specialist in spaceborn flight systems." Florissa answered first as she glanced at Alloc. "Part of the reason why I am transferred aboard your lovely factory ship is because your design department lacks this specialty. It's a show of good faith on our part, and a sign of appreciation for all the assistance you have rendered us over the years."

Again, Ves received another clue on the closeness of the ties between the Vandals and the VRF.

"What about you two ladies?"

They both looked at each other for some reasons before they smiled at him. Iris spoke first. "I'm a specialist in neural interfaces, while Lucille is a heat sink specialist."

All three of them possessed an eclectic mix of very specific specialties. Two of them happened to be very relevant to the design department. As for the specialty mentioned by Iris, Ves almost had to do a double take.

"You design and customize neural interfaces?" Ves asked with more than a bit of doubt.

Messing around with neural interface was dangerous work at the best of time. Implemented incorrectly, and a mech could easily fry the brains of their mech



pilots. The vast majority of mech designers utilized standard neural interface models that the MTA made available for free.

In general, there was little demand for customizing neural interfaces. Everytime someone messed with it, they risked upsetting some sort of limit and turned the neural interfaces into torture machines.

"It is a family tradition." Iris spoke proudly. "We Jupiters have worked on neural interfaces designs under the auspices of the MTA for generations. They've approved each product we've released over the years."

"Is that still going on?"

"Sadly not." She replied, seeming genuinely stricken all of a sudden. "A long time ago, we Jupiters affronted a relative of a powerful duke. The incident was small and nothing should have come out of it, but the duke himself moved to retaliate against our entire lineage. We lost everything within a matter of weeks. Our contracts turned invalid, our partners stopped supplying us, our employees left our research labs and our products got smeared on the galactic net."

Florissa sighed and pulled Iris into a hug. "What the Jupiters have suffered is something which happens all too often in a tyrannical state like the Vesia Kingdom. The nobility is always right. In a dispute between a noble and a commoner, we have as much rights as a pig reared for slaughter."

When Ves was young, he often heard tales of such abuses in school. He realized later on that the stories were meant to malign the Kingdom and made them out as a place of horror who would dearly bring their abuses over the the Republic once they conquered it. It was the duty of everyone from the Republic to resist such tyranny.

Propaganda or not, the stories always held a kernel of truth. Hearing such an example from Iris really made it clear to Ves that the lessons he learned at school hadn't pulled those anecdotes from thin air.

"Have you adjusted yourself to living with the rebels? What is there to do with them?"

"Oh, the VRF has been good to us." Iris nodded as she wiped away her tears. "You have to know that while our rebel movement can easily get our hands on mechs from the private market, it's difficult to hide our whereabouts. We would rather buy the raw resources from the market or the other rebel groups and fabricate our own mechs. Keeping our design and production activities in-house guarantees that the mechs don't come with spying devices or software hacks."

"So it's a matter of maintaining complete control over your mechs. I can understand that." Ves replied. "Do you keep all of your designs for internal use or do you also sell your mechs to other groups?"

Florissa answered this question. "We maintain a lucrative business in selling mechs to the smaller rebel groups. It's not easy for newly established rebels to get their hands on fully functional mechs. This helps them kickstart their rebellion and allows them to cause more trouble to the nobles."

That didn't sound very good to Ves. There was no way a small group of malcontents could threaten the rule of the established powers in the Kingdom. Ves did not ask for the outcomes of these so-called rebellions. Instead, he focused on the other aspects of their stories.

"It sounds like the VRF has taken on the role of the black market."

"That's exactly what we are in Vesian space. As an organization that resists the tyrants who believe they have a birthright to do everything they want,

we've suffered too many betrayals from gangs and pirates that are able to supply us of the things we needed."

"The Vesian underground scene is split into two parts." Alloc interjected. "One part consists of the regular scum of the galaxy. They don't care about nobility and politics. They even like such a system, because nobles sometimes become their best patrons."

"Alloc is correct." Florissa nodded. "In our eyes, the noble Houses are nothing more than gangs that enjoy official sanction. The two work well together whenever their interests align. It's not safe for rebel movements like ours to build a long-term relationship with the underground groups. The trust simply isn't there. That is why we have built up our own underground trading network. We are one of the few middlemen that rebels across the Kingdom can trust."

Truly, the more Ves heard about the VRF, the more his impression of them veered away from a traditional rebel group like the Bentheim Liberation Movement.

Whereas the BLM lived like cornered rats that sought refuge in the deepest depths of the planets or in the most desolate corners of a lifeless star system, the VRF merrily went about earning a handsome profit from facilitating trade between different rebel groups. They sounded surprisingly mercantile for a movement that ostensibly sought to overthrow the feudal order.

"How far along are rebel groups like yours to launch an uprising?" Ves pointedly asked.

All three ladies fell silent for a moment.

#### Chapter 447 Charming

The oldest among them, Florissa, recovered the quickest. "The Vesian Revolutionary Front has been planning the downfall of the nobles for decades. Unlike other movements which attempt to enact an immediate change, we

have been much more deliberate in our approach. As much as we think the nobles are detestable, without convincing the rest of the commoners who are ignorant of the abuses, our rebellion doesn't stand a chance."

In other words, the VRF talked big but didn't do much to back up their words. Ves understood their position somewhat, but these Vesian rebel movements all sounded like they enjoyed their current position a little too much.

Well, it was none of his business, so he simply shrugged and moved on. "Will the three of you be helping us out?"

"That is why we have been sent. I have already corresponded with Professor Velten for the last couple of weeks, so we know what to expect. We have a lot of work ahead of us."

Perhaps Ves could make use of their presence.

"All three of our designs could use a lot of help. If I may say so, I think it's best you start with the Inheritor design. The light skirmisher is our most stagnant project and could dearly use a firm push."

"Ah, your famous Inheritor mechs. Well, we can't make any promises, but we will see what we can do. Perhaps our specialties will provide the breakthrough you are hoping for. We make no promises, though. We are restricted in the advances we can extend to the Vandals. Trading some of our prized secrets will demand an equivalent trade."

"We expect nothing less." Alloc answered for Ves. "We can compensate you for any assistance you can provide or technologies you can introduce to us through your shell companies."

As Alloc discussed the issue with Florissa, Ves learned that the VRF established a concrete presence in the Republic space. In fact, they owned a whole string of shell companies that performed various services on their behalf!

The main issue for the Vandals was that as a legitimate mech regiment, it couldn't resort to pirating designs and exclusive technologies. To make such a transaction seem proper and above board, the VRF made use of its shell companies to provide some of their transactions with the veneer legitimacy.

It all sounded very shady to Ves, but apparently that was the way the Vandals and the rebels always did business.

As the two older mech designers engaged in their own conversation, Ves had been left with the two younger ladies. Both Iris and Lucille looked charmingly at Ves with big, blinking eyes. Ever since they associated him with Master Olson, they inched a little closer to him, though that was difficult since they sat across the dining table.

Of the two, Ves hadn't heard much from Lucille, so he decided to ask about her background. "So, are the Hornbachs a family of mech designers like the Jupiters?"

"No, nothing like that." She shook her head. "I started studying material sciences and transitioned into mech design halfway. No one in my family has ever been involved with designing mechs before. It turns out that designing mechs is a lot more enjoyable to me. After I graduated, I already had a job lined up at a major mech manufacturer."

"So did you already specialize in designing heat sinks?"

Lucille nodded. "I became famous for that immediately. I studied long hours into the night after work to increase my knowledge on heat sinks. I worked hard in the company to assist in designing the best heat sinks for their products. All of this went well until..."

"Until?"

"Until the patron of the mech manufacturer fell. I thought that the company that I worked for was an independent business. Only later did I find out that it's

actually owned by a small count who fell out of favor. Once his enemies got rid of him, they took over all of his assets, including his company. That's when all the trouble began."

"Did they harass you?"

"Nothing of the sort. They simply raided the money the company had set aside to invest in new licenses and research. We needed that money to develop new mech designs. Without it, our future was bleak. Eventually the company let me go because they couldn't afford to retain so many mech designers."

That didn't sound so bad. "So how did getting fired end up with you joining the rebels? That's quite a leap, you know."

Lucille smiled a little ruefully at him. "I joined on my own volition."

Ves wanted to rub his fingers in his ears. Did he hear that correctly? "Isn't that a little premature. Not that I have anything against the VRF. It just sounds a bit impulsive to me."

The young woman sighed and brushed back her lustrous black hair. "I put my heart and soul in that company. They truly made me feel at home. Having been ripped away from them, only to see them deteriorate from lack of investment pained me more than anything. I pity those who are still left in the company trying to plug a ship that is leaking air from over a thousand different holes.

Ves somewhat believed her, even if he thought she was being a little hasty with her decision. Many companies tried to foster loyalty and commitment among their workforce. Ideally, each person who worked for the company would develop a cult-like attachment to them. It was the best formula to retain talented employees and it had worked for humanity for thousands of years.

Miss Lucille sounded like a typical dupe who had bought in to the whole corporate culture.

"Are you happy with the VRF?"

"I am, though there are too many mech designers in their ranks I think. That makes it a little more difficult for me to stand out."

"I imagine it helps that you specialize in designing heat sinks. Not a lot of people pay attention to them, despite relying heavily on them to keep their mechs running."

"If you think about it, every mech is a giant heat generator." Lucille said.

"Energy is converted into various movements and attacks. Large amounts of waste heat emerge from these transformations. Despite the progress that our race has made since they emerged from Old Earth, we still haven't been able to achieve perfect efficiency. Waste heat is a fact of life, no matter the race. Whether it's humans or aliens, we are all facing the same constraints."

Many mech designers treated heat sinks as an annoying necessity that they begrudgingly include in their designs because it wouldn't function without them. That was the wrong mentality to adopt. Heat sinks formed a vital function that wasn't any less important than a power reactor.

One part generated usable energy, while the other part handled the waste heat.

Ves had in fact gained a new appreciation of heat sinks ever since he won the Amastendira. The wondrous weapon that utilized some of the most advanced technologies from the galactic center utilized something which the weapon referred to as a dimensional heat sink.

It basically absorbed any waste heat within its body and shunted it into another dimension, thereby solving the problem in the easiest but also most extravagant manner possible.

Although the dimensional heat sink only worked up to a point, it was still an amazing picture of what the end point of heat sink technology looked like. Ves hoped that he could incorporate them into his own design one day.

Ves entered a brief discussion about heat sinks with Lucille. Despite his broad base of knowledge, Lucille knew quite a bit about materials science, while her insights into thermodynamics veered into a completely unknown territory to him.

It became clear that with regards to heat sinks, she was truly a specialist who was leagues ahead compared to a generalist like Ves.

Someone with her specialty was in high demand to any design team that worked on spaceborn mechs or mechs that predominantly relied on energy-intensive weapons such as lasers.

The banquet ran on for several hours until it came at an end. During this time, Ves spent most of his time learning more about what they brought to the table as mech designers. As Iris and Lucille both possessed specialties that pertained to specific components, they could potentially provide a substantial boost to the three designs that the Vandals still kept developing.

As the guests retired to their own compartment aboard the Wolf Mother, Ves and Alloc walked back to their own section of the massive ship. The corridors had dimmed down a little, signifying that it was standard night time.

Once they fell well out of earshot from the Vesians who attended the banquet, Alloc began to speak.

"Did you enjoy your time with the girls?"

"Uhm, they're very competent, sir."

"Rrrright. Competent. Interesting choice of words." The Journeyman curled up his lips before bringing them down to a frown. "Don't fall for their tricks. The



VRF always sends out a couple of vixens to us. They're always easy to talk to and pleasing to the eye, but that still can't change the fact that they're Vesians."

Ves grasped the implied meaning and stopped smiling as well. "I understand. I think. If that's the case, what is the VRF after?"

"It's one of the many games they play. The VRF may not look impressive as an insurgency movement, but their influence reaches well beyond the borders of the kingdom. They have their fingers in a lot of different pies. Don't underestimate their skill in trade and diplomacy. They're always out to make a deal with you, couched in terms that sound great at first, but turn out to come with several inconvenient caveats."

"If they're so inconvenient, then why do the Vandals accept this kind of behavior, sir?"

"Don't ask me." Alloc shrugged helplessly. "I once asked the same thing to Professor Velten. She told me that it's one of the concessions the Vandals have made to the VRF. The slick-talking diplomats of the rebels have even gotten us to agree that any mech designer that wants to defect to the VRF is allowed to do so without restrictions."

That really got Ves to halt. What a ridiculous concession! "Has anyone ever taken up this offer?"

"Pff. Look at how few designers are on our design team and you have your answer."

That was impossible. There was no way the Vandals would tolerate the VRF stealing over eighty mech designers from them. Ves looked at Alloc with a suspicious eye.

"Okay, maybe I exaggerated." Alloc held up his hands. "Only five mech designers that I know of has defected to the VRF over the past decade. Those

mech designers haven't been content in their current postings anyhow, so good riddance to them. The only regret that we have is that they are all rather good at what they do. The VRF mainly targets Journeyman Mech Designers. That's what Florissa is here for. She's mainly targeting me and the two other Journeymen in our department."

Though age gaps didn't count for much in this day and age, people would still frown at couples whose ages visibly diverged. It would be unseemly for Ves to hook up someone like Florissa.

Instead, he could look forward to the advances of Iris and Lucille. Great.

"Well, the cat's out of the bag. Now that I know, I won't fall for their tricks." Ves declared with some conviction.

"That's what they all say, Ves, but when it comes to the matters of the heart, we turn into some of the dimwitted sentient beings in the galaxy. Love makes you stupid."

Despite Alloc's warnings, Ves did not think much of the threat posed by the three women. He was a Larkinson, and a Larkinson never abandoned the Republic. He also thought of himself as a rational thinker. Though he acted on a couple of reckless impulses from time to time, at his core he believed himself to be an enlightened thinker.

There was no way Ves would turn silly because of a silly face.

#### **Chapter 448 Guest Designers**

The design department gathered in the conference room next day. Professor Velten introduced the three guests from the VRF to everyone.

"I expect you to treat our guests with decorum, but also be mindful of what you are and aren't allowed to say. I'll send you a detailed list after this meeting. Read it carefully and memorize what you are not allowed to tell. I don't need to remind you that the Mech Corps doesn't take it lightly if they see elements

of their exclusive technologies ending up in the hands of the Vesians, no matter if they are royalists or rebels."

Once she made her point clear, she moved on to the main point. "With the arrival of the delegation from the VRF, our plans have accelerated. Our main fleet is currently on track to arrive at our target in roughly two weeks. This means there is no time to implement any major revisions for the time being. The main priority of the Vandals is to repair and upgrade every mech that still needs working on. Make no mistake. We need as many mechs operational as possible."

This was it. The first major operation of the Flagrant Vandals since he arrived. And this one was a real doozy. Though his days aboard the Wolf Mother had passed by in peace, in actual fact the factory ship and her escorts dove deeper and deeper into Vesian space.

It was actually a miracle that the Mech Legion hadn't found them out. That and the VRF did a good job securing passage for the Vandals.

One of the other Journeymen raised his hand and asked a question. "What will our jobs be?"

"Your design teams are to continue to seek every possible method of improving the performance of your designs. Our guest designers will offer their services to to your teams on a semi-rotating basis. Try and get a quick fix done within a week so we can quickly propagate those fixes to the current crop of mechs that the Vandals have on hand."

After that, everyone split up and got to work. Florissa, Iris and Lucille all started to advise the design teams on how to tweak or improve their chosen specialties. No matter their motives, Ves had to admit that their specialized knowledge came in really handy.

In particular, Florissa's extensive expertise on flight systems far surpassed everyone else's grasp on this large and complex part. Professor Velten might possess a much broader base of knowledge, but even the old lady hadn't immersed herself into perfecting flight systems to such an extent.

The Vesian Journeyman practically charmed everyone with her friendly demeanor and openness to answering any questions the Apprentices asked. She rotated between the design teams of the Inheritor and the Hellcat, but due to a lack of time, the professor instructed her to focus most of her efforts on improving the flight system of the Hellcat design.

"The Hellcat is one of our best mechs, and has to be in tip top shape for the upcoming operation. We also have much less Hellcats on hand, so it will be easier to modify them all in time for the Vandals to begin their assault."

When Ves heard about the decision, he winced and shook his head. It seemed like the Inheritor could never earn a break.

As for Lucille, her expertise into heat sinks led Professor Velten to instruct the Vesian Apprentice to spend most of her efforts on improving the maximum heat capacity of the Akkara heavy cannoner design.

"The Flagrant Vandals will be descending from orbit numerous times according to the latest plans. Since we are rather lacking in the ranged firepower department, it is of utmost importance that our Akkara mechs can output as much firepower as possible to defend our landing zones."

With the two guest designers already veering away from the other designs, the Inheritor design was left with hardly any love. The only guest designer who remained was an odd bird who possessed a specialty that wasn't conducive to quick fixes.

Nevertheless, Ves thought he could use her esoteric qualifications as a vehicle to enact his own improvements.

The good thing was that Iris was remarkably open to his ideas. She smiled at him and touched his shoulder with her palm. "That's great! I was afraid I wouldn't be of use. The VRF has a lot riding on this operation as well, you know. Anything that can make the Vandals stronger will also make our lives easier as well."

Ves hadn't heard anything like that before.

"The Vandals aren't raiding the industrial star system on their own?"

"Of course not, silly." Iris held up a hand in front of her mouth as she giggled. "Industrial star systems are heavily protected by several garrison regiments. While not all of them are mech regiments, their combined strength is more than what the Vandals can handle even if they bring all of their assets to bear. That's why you need us."

"You mean the rebels don't have any qualms with being seen together with the Vandals?"

Something like that sounded truly crazy. Rebels working in concert with their foreign enemies was generally seen as a profound betrayal that wouldn't endear the citizens standing on the sidelines.

"That's we aren't planning on showing up in our own colors. Our organization and its partners have already applied the coatings of a pirate organization to our mechs. Our presence will therefore be explicitly seen as a destructive one, rather than an attempt at liberating the star system. It's too early to attempt such a momentous action."

That was a devious if dishonest plan. Ves had to applaud their daring to moonlight as pirates. They could rain as much destruction as they wanted while their public mouthpieces decried the devastation and put the blame on the fat and lazy nobles that let the pirates run roughshod over their star system.

What Iris revealed to Ves hinted at the magnitude of the next operation. This was no simple smash and grab kind of raid. This was a major assault on a highly developed star system. The ensuing damage would be hard to imagine, but so would the loot the Vandals might be able to abscond.

To his eyes, the Vandals definitely played with fire this time. They took on an unimaginable amount of risk, but if their daring action succeeded, the rewards would be enough to turn around the fortunes of the declining mech regiment.

Besides robbing the abundant amount of riches that any industrialized star system possessed, a victory would also be a major boost to their reputation. Striking the Imodris Duchy a blow that they would continue to feel for generations would definitely be a feat that the Mech Corps had to propagandize as far and wide as possible.

The Vandals definitely aimed to secure a continuation of their existence.

Because the stakes were so high, Iris had been tasked to find any way boost the performance of the neural interfaces in any way possible. Even if the manipulation of neural interfaces was fraught with catastrophic failures, Velten did not have the luxury to keep an expert on the sidelines.

Due to her strange expertise, Ves happened to be a good fit for her. His supposed expertise accomplished something similar to what Iris accomplished, but from a different approach. In the end, they both aimed to increase the compatibility of the mech pilots with their mechs.

Since the Akkara and Hellcat designs already enjoyed the attention of the two other Vesian designers, Ves steered Iris into working on the much less appreciated Inheritor design. She broke her perpetually charming smile upon hearing his suggestion.

"Is the Inheritor not a low-class design? It is hardly worth our attention."

Ves became a little angry at her casual dismissal of a design that hundreds of mech pilots relied on to stay alive. "There are many lives at stake, far more than with the Hellcat and the Akkara mechs. If you care at all about the lives of those poor pilots, then you owe it to yourself to better their chances of surviving the coming battle."

To her credit, Iris noticed his displeasure and quickly turned contrite. She bowed in front of him. "I'm sorry! That was very insensitive of me. I hope you can forgive me!"

He had mixed feelings about her sudden apology. She made a very convincing display of being sincere in her regret, so Ves couldn't it again her. He softened a bit and nodded.

"Don't forget our creed as mech designers. We exist to serve the mech pilots and better their ability to fight. Sometimes I think that some of my colleagues have forgotten this priority."

As someone who grew up among the Jupiters, it was impossible for her to be ignorant of this saying. Otherwise, their family wouldn't have been trusted by the MTA to work on developing new neural interfaces.

"I will take your words to heart." She pressed her hand on her chest. "Please show me around."

Ves brought Iris to the workplace of Inheritor design team. All of the mech designers were somewhat familiar to Ves, but the presence of Iris was a novelty to them, especially since she was a very pretty girl.

However, Iris stuck close to Ves, which somehow made it impossible for the other men to approach her or pull her into a conversation. They all looked back at Ves with mixed expressions.

Ves did not have time to play any games. He immediately broached the topic of coming up with some short-term fixes for the Inheritor. "What kind of fixes have you guys been planning?"

The Journeyman in charge of the team answered his question. "You know our situation as well as I do. We essentially have nothing to suggest."

Ves expected this answer, though he still felt disappointed when he heard it from the team leader's mouth. Every easy fix possible had already been exhausted before. The Inheritor design team had in fact come up with many more solutions, but the only way they could implement them was if Professor Velten lifted the restrictions imposed on the design.

Fat chance of that ever happening.

Therefore, Ves planned to be a little creative this time. "This is Iris Jupiter. As you know, she knows more about neural interfaces than all of us put together. I suggest we allow her total leeway into seeing if she can improve the neural interface of the Inheritor and assist her in any way possible. What are your thoughts?"

No one objected to his suggestion, partially because they didn't have a direction and Ves just pointed one out for them. Even the Journeyman went along with him. Years of working on the frustrating mess that was the Inheritor design had really taken a toll on his confidence.

Meanwhile, Laida sat quietly at the side. She hadn't spoken up even once, but she regarded Iris with an ambivalent attitude. The design teams of the Vandals generally held quite a few more men than women, and the introduction of Iris to their team completely changed their dynamics.

After settling in, Iris immediately went to work. She sat behind a spare terminal and browsed all of the relevant design schematics and documents in rapid tempo. Ves sat next to her and worked on preparing his own solution.



His main issue was that it wasn't easy to foster the X-Factor in a mech. Certainly, the difficulties increased exponentially when dealing with a collaborative project that had already produced many copies of the mech.

Ves simply didn't think about raising the X-Factor of the Inheritor all the way to a B-grade. Raising it to an F or an E-grade would be enough of an accomplishment, but only if he could find a way to achieve such a feat.

How could he bestow the X-Factor to a design that was already mature? How would he be able to achieve this without overhauling an entire mech?

#### Chapter 449 Trivial

While Iris devoured every detail about the Inheritor design she was allowed to access, Ves practically sat motionless as he struggled to come up with an approach that worked.

Before the Mech Corps assigned him to the Vandals, Ves never truly collaborated with another mech designer on a joint design. Sure, he modified plenty of existing mechs and he briefly worked together with another mech designer during a competition, but those didn't concern true mechs.

The Inheritor design spawned hundreds of mechs and formed the backbone of the Vandal spaceborn mech contingent. Due to the constant minor updates to its design, a lot of variations existed within the mech regiment, but all of them roughly shared the same commonalities.

This also happened to include their spiritual stunting. They never had the chance to develop even a hint of life from the onset their design came into being. To someone like Ves who exhibited a basic appreciation for almost every mech, this attitude of treating them as disposable commodities irked him in a very fundamental way.

That mentality clashed squarely against his budding design philosophy.

What he faced right now was perhaps one of his greatest test in his career. Even if no one would put him to task for failing to come up with a solution, he would still feel bad for himself for letting the Inheritor mechs be deployed into battle in their grossly inadequate states.

To find a viable approach to this seemingly impossible task, Ves needed to go back to the root of his theory on the X-Factor.

What did he wish to accomplish?

"I want the Flagrant Vandals to succeed with as few losses as possible."

"I want the Inheritor design to receive more appreciation to increase the odds of success."

"I want the Inheritor to be a mech that possesses just enough life to be of assistance to its mech pilot."

What means did he possess to engender the X-Factor into a design or mech?

"I can work on a mech in person and infect it with my focused mentality."

Ves already proved this method worked. The spiritual entity of a mech was a smorgasbord of all the emotions and thoughts of the people who worked on the mech and its design. This was why his gold label mechs possessed such a strong X-Factor and why the mechs the MTA materialized into being appeared clinically dead.

As much as Ves knew for certain that this method worked, the amount of labor involved was exorbitant. There was a reason why the LMC sold less than a hundred of his coveted gold label mechs despite their enviable profit margins.

It required too much personal attention from him, and he had better things to do with his time. Forcing a mech designer to fabricate a mech in person was like forcing an architect to construct a house by hand.

"This is the dumbest solution available to me. It works, but it's not practical."

To truly affect every Inheritor at once, Ves needed to affect a change in its design, and subsequently allow it to be passed on to the mech technicians who applied his changes into the existing mechs.

Ves had never done anything like this before. The challenge daunted him because he was treading completely new ground, and unlike before, he did not have access to his precious Mech Designer System to cheat his way out.

Still, System or not, Ves had never relied on its help to progress his understanding of spirituality and the X-Factor. Everything he gained so far had been products of his own ingenuity. Mostly.

He turned back to his original goal, to find a way to induce a comprehensive improvement of the X-Factor in each copy of the Inheritor. To do so, the design itself needed to acquire measurable amount of X-Factor.

"According to my theories, all it takes is my personal involvement."

Ves possessed a substantial amount of Spirituality, far beyond a regular human being. This enabled him to imprint his thoughts onto an existing mech with some effort. The same should apply to working on an existing design.

To sum it up, it did not matter what kind of changes he made to his design. As long as he did it extensively enough to leave his fingerprints on the design, its X-Factor should definitely be contaminated by his thoughts. Perhaps enough to foster some kind of life in this deadbeat design.

All of this sounded as if he came up with a solution to his problem, but in fact Ves was no better off than before. "I can't think up a way to improve this design."

Therein lay the rub. With several Apprentices and a Journeyman working day after day on this design, its level of optimization had reached an insane level. Even if they focused on cutting costs rather than increasing its performance,

so much time had passed and so much work had been done that a newcomer like Ves wouldn't be able to spot any holes in its design.

Ves turned to Iris, who tucked her coiffed blond hair behind her ear. Perhaps she noticed his stare, because she turned her head and looked at him with a questioning expression. "What is it, Ves?"

"Ah, I'm still brainstorming some ideas. I've thought of several ways to improve this design, but they can't be applied because Professor Velten won't allow it to exceed the hard limits imposed on it. I can't get around these limitations."

Not normally at least, but with the help of Iris he may be able to accomplish something. "I'd like to work together with you for something."

"Uh, what?"

"When you come up with some modifications, bundle some of mine in them as well. I'll try and come up with some ways to compliment your work so that they'll mesh well together. Then, let's serve our work in front of Professor Velten and see whether she's still willing to reject our combined solution."

"I'm not so sure about this, Ves. It sounds as if these hard limits exist for a reason. If she's as obstinate as you say, she won't change her mind just because of my presence here."

She had a point. His suggestion may not sink in to that old coot and her rigid insistence on keeping the Inheritor as light as small as possible.

"Then perhaps I can go at it in a different direction." He mused for a moment. "I think I have a way to stay within the limit. Instead of upgrading the design, I can sidegrade it. The mech won't improve, and there's a risk of introducing inefficiencies, but I think this is the right way to go."

Iris didn't agree with his assertion. "The Inheritor is highly optimized in its current configuration. A downgrade will certainly lead to unintended consequences. Without months of testing, you can't insure that the design will take a step backwards in performance."

"Even if you're right, I still have to try."

They turned back to their work. Iris spent the first day reading up as much as she could before requesting to see some Inheritors in person. While she toured the Wolf Mother's various hangars to observe the mechs take some readings, Ves sat behind his terminal hard at work at overhauling one of the most important but also inconsequential parts of a mech.

The cockpit.

When Iris came up with her quick fix, she would inevitably demand a change to the cockpit's neural interface. This device played the main role in establishing a connection between a mech pilot and a mech.

Some neural interfaces put hard bucket helmets on the top of a mech pilot's head. Others extended alloy rods on each side of the headrest of the piloting chair. Many more did not employ a visible apparatus at all. Instead, their workings had been embedded into the seat or behind a wall panel and worked to establish a fully remote connection.

Each method came with their own advantages and disadvantages. The Inheritor employed a wireless design due to the mech's tendency to perform lots of rapid turns in space. While the cockpit's inertial compensators negated most of the g-forces applied to the mech pilot, they didn't always work as intended, especially when the cockpit sustained damage.

Therefore, light mechs predominately utilized a remote interfacing method, thereby allowing mech pilots to jostle their heads around in every direction without bumping into anything stiff.

These remote connections generally worked fine, but their reliability always came into question when fighting in an area with heavy interference. For example, fighting somewhere close to a sun or a black hole where all kinds of strange effects occur would always interfere with the signal between the mech and mech pilots.

Better technology and higher quality designs helped mitigate this problem, but even in the galactic center, nothing could beat a physical connection.

One of the ways in which Ves thought that could work was to suggest Iris to come up with a plan to switch the remote interface to a physical buckethead interface. Some mech pilots preferred the so-called buckethead interface because its reliability was without question.

Naturally, it didn't need to be shaped like a bucket. That was just a general term that mech pilots and mech designers used. The more correct term was helmet, and it could even be stripped down to a headband if needed.

No matter the size and shape, the shift from a remote interface to a buckethead interface allowed for modest weight and space savings. A remote interface came with a lot of complexity that could only be dealt with by sufficiently powerful hardware.

In comparison, a buckethead interface worked relatively straightforward. It was an old school technique that had received countless of refinements over the centuries. Many superfluous aspects and parts had shrunk over the time, to the point where they only took up half the space of a remote interface.

Ves opened up a design program, loaded the file of the Inheritor design, and proceeded to draw some sketches for his changes.

The first thing that had to go was the old neural interface. He would leave the job of filling the gap to Iris. In the meantime, Ves turned back to the design and began to sketch out further changes to the interior of the cockpit.

"Raise the height of the forward console by 2 millimeters."

"Change the seat leather from an organically sourced leather to a synthetic substitute."

"Four monitor projections to the left is overkill. A mech pilot often uses two at most. I can definitely shave one off."

Ves did not focus on solving the major issues of this design. Instead he homed in on the cockpit and planted a lot of minute changes that no one except Ves would notice.

None of what he suggested so far would be able to propel the Inheritor's performance to another level. The quality and magnitude of his work didn't matter as much as how much time he spent on leaving his fingerprints on the design.

The more, the better. Volume counted the most. Even if it was an inconsequential change such as shifting the chair of the pilot forward by a millimeter, it did not change the fact that the design had been affected by his intentions, however brief it may be.

Over the next several days, Ves continued on his project to overhaul the entire interior of the cockpit. Iris meanwhile followed his suggestion and worked on designing a buckethead interface to replace the old and familiar remote interface that the Vandals had always used for this mech model.

Both of them rushed to complete their work as fast as possible. Ves had in fact finished his laundry list of trivial modifications, but he still needed to spend several more days in simulating every possible thing that could go wrong.

Several things did in fact turn up creating new vulnerabilities, but it was a lot easier to Ves to simulate the cockpit as opposed to an entire mech. Ves rapidly plugged the holes as they came.

Once they reached the end of the week, Ves and Iris both stepped forward into Velten's office, ready to present their solutions. They walked close together and when they sat down on their chairs, Iris put her hand over Ves' hand, which he readily accepted.

This was a moment of truth for the both of them. Ves smiled at Iris before he turned to face the old lady.

"Well, what have the two of you achieved? I hope you haven't wasted the last week. Let's hear your proposal."

#### Chapter 450 Driven

No Senior Mech Designer ever made it to their rank by being stupid. Despite her slow responses and her erratic behavior, when it came to mechs, Professor Velten was as razor sharp as any mech designer.

She immediately took note of the abundance of superfluous elements in his design proposal.

"Mr. Larkinson, of all the elements of a mech that you could have chosen to work on, you focused on the cockpit. Worse, besides switching the neural interface systems, most of these changes appear to be purely cosmetic! I can understand if you've made the cockpit sturdier or increased its ability to withstand a breach, but all you have done is rearrange its interior! What do you have to say for yourself?!"

Ves held up his hands. "It's not cosmetic, ma'am! Far from it! Every adjustment I have made is needed to increase the ergonomics of the cockpit!"

In order to cover for his ability to affect a mech pilot through the X-Factor, Ves had delved into real ergonomics several times before. Just for this occasion, he brushed up on his theory by referencing the textbooks the Mech Corps made available through the central database.



"According to Leitzbritz's theory of luminescent comfort, putting more than three projectors in a row will excessively distract the mech pilot and..."

"The height of the piloting chair is set according to the average height of every mech pilots in the service more than a century ago. That's fine as a whole, but the average height of the mech lots in the Flagrant Vandals is a little bit shorter than that..."

Ves basically spun a tale of nonsense cloaked in scientific rigor. The vast majority of his adjustments had no point. They were only there so that Ves could leave his fingerprints on the design. While he changed plenty of things inside the interior, getting these changes approved was a very different matter.

After a couple of minutes of blabbering on, Ves reached the end of his prepared speech. He waited in a tense moment of silence as Velten parsed his words.

"I have no doubt that your applications are sound." She conceded slowly and knocked a gnarly knuckle against her desk. "Yet none of it seems worth it. How will any of these changes improve the performance of the Inheritor? As much as you tout the benefits of this proposal, there is an alarming lack of hard estimates on how much the design will improve. How am I supposed to approve to the wholesale modification of every Inheritor in our possession, thereby wasting a large portion of our limited logistical capacity?"

In other words, Ves might have talked a good game, but he hadn't been able to justify why the Vandals should overhaul the cockpit interiors of every Inheritor. It wouldn't take a lot of time and effort to rearrange the interior of a single cockpit, but it was an entirely different story when it came to hundreds.

A mech regiment as large as the Flagrant Vandals constantly ran their production equipment night and day, doing all sorts of tasks. The mech

technicians always had more things to do. Thus, convincing the Vandals and Professor Velten that his changes was worthwhile would always be an uphill battle.

Fortunately, Ves already prepared an answer to this question. He withdrew a data chip from his pocket and gently put it on the desk. "I have already tested out the changes. The raw data and the results are in the data chip. Please take a look, professor."

The professor looked at him with a little skepticism, but she didn't dismiss the data chip out of hand. As she slid the secure data device in her terminal, she began to peruse the logs and data that Ves had recorded during the tests.

This was his trump card for this meeting. During his stay with the design department, he heard many stories about Professor Velten. Everyone spoke about her ironclad rigidity on certain matters.

If she expected someone to finish a report within a day, he better well do it or he would face a reckoning.

If she said that someone should increase the performance of a specific component by a couple of percentage point, the entire design team would be forced to slave for weeks or months until they finally achieved their goal.

A mech designer like the professor was set in her ways, and she never showed any leeway in anything. That troubled Ves a lot, and he struggled to think of to deal with this personality trait until he realized that if he played things correctly, it could play to his advantage.

While most of his fellow mech designers grumbled about Velten's inflexibility, Ves recognized that she was simply a mech designer that worked in terms solid numbers and quantifiable results. In other words, she was a very data driven engineer.

To overcome the objections of someone who was driven by data, Ves merely had to serve up additional data that played in his favor. So in the final day before he had to report to the professor, Ves brought Iris to one of the Wolf Mother's hangars and conferred with Chief Carmon and Lieutenant Chandis.

"I have a way to renew the Inheritor." He began after pulling them aside. "Iris and I have worked on a set of minor modifications that will boost the performance of a mech pilot. The changes aren't very big, but it could potentially be the start of something bigger."

Ves proceeded to explain a summary of what he had in mind.

"What do you need us for then?" Chief Carmon asked as she crossed her hefty arms and chewed on an illegal stimulant. "I don't know if you've noticed, but we're kind of busy right now. We don't have time to spend on installing fancy frills like a spiffed up cockpit."

The lieutenant voiced his own objections as well. "My men are used to piloting with bare heads. They won't take buckethead interfaces very well. Light mech pilots really hate those unwieldy things!"

"Don't knock it until you try it! I only need one mech and a test pilot to gather some data. What will it hurt? Besides, once I can get this modification proposal approved, it might open the door to further improvements."

They both thought that this was a waste of time, but the carrot that Ves had dangled at the end sounded very tempting. If Ves could get the obstinate professor to approve of further modifications to the Inheritor design, then they stood a chance of vastly improving its survival rate.

To that end, letting Ves free reign on a single Inheritor mech was a cheap price to pay.

"Okay, you've convinced me. Go ahead, but don't change anything else!"

"Thanks!"

Ves and Iris proceeded to inspect the Inheritors in the hangar and selected the most up-to-date one because it matched the current design the closest.

After that, Ves personally worked on tearing out the old interior and replacing it with his own. He did everything in person, from fabricating new replacement parts, to assembling them into place at their exact positions.

Iris in the meanwhile worked to fabricate and install the buckethead interface system. Though Ves could have taken care of this chore on his own, he found it best to leave it to a genuine expert.

"It's best you leave it to me because I can tailor this neural interface to our test pilot." She said. "Not all neural interfaces are born the same. The best ones are made to accommodate the mind of a specific mech pilot."

So Ves left the job of installing the best neural interface system as possible on their testbed mech while Ves cobbled together the rest. He worked quickly but efficiently, helped by the fact that none of the work involved anything challenging. At his level of skill, putting together the revamped interior was a piece of cake.

All the while he worked on overhauling the interior, he focused his mind on the Inheritor in order to foster its X-Factor. Since it wasn't his own design, he did not attempt to usurp its dominant flavor, nor did he try to go directly against the intentions of the original designers.

The Inheritor's X-Factor still needed a direction, though. While he couldn't go against the mech's original intentions, he could add something small to it that nudged it in a better direction.

Therefore, when he drew up the modifications to the design, he infused it with a single, abstract idea, one that would have presence even if it was diluted to an enormous extent.

Anything more complex might not hold up because of his lack of involvement in the design. Ves had seen plenty of mechs of other designers that held some potential, but ended up with stillborn spirits. That was because even if the mech designer put a lot of his heart into his design, he washed his hands off them as soon as he completed it, and left the production of the mechs to some efficiency-driven mech manufacturer.

Thus, Ves needed to keep things simple. After a bit of thinking, he bestowed the Inheritor design with the concept of survival.

Why survival? It was more than simply wishing that it would last longer on the battlefield, though that would certainly help. Ves chose to focus on the concept of survival because it was the primary drive of a short-lived species, no matter if it was mechanical or biological in nature.

Ves likened it to humanity's place in the galaxy. Were they not like the Inheritor version of a sentient race? When humans first sprang up during the Age of Space, they were seen as weak and pathetic sentients by the alien races that ruled their corner of the galaxy. Humanity's intelligence, strength and lifespan all fell below average to the more privileged races that evolved on planets with an abundance of exotics.

Well, humanity enjoyed the last laugh. Their lack of dependence on exotics and relatively high birth rate allowed them to outgrow those stagnant and snobby alien races.

Yet why did humanity come to dominate half the galaxy while other humanoid races that shared the same broad traits wallowed in obscurity?

Many human supremacists likened their success to fate or their superior genes, but more sober-minded scholars and philosophers attributed it to their drive to survive. Their race faced constant challenges during their rise, and

each time they overcame their existential crises through grit and the drive to stay alive.

Survival was one of the most primal goals that drove the human race, and Ves incorporated its purest form into the design and the mech he modified.

He felt it taking shape underneath the materials he shaped and placed according to his will. He even rejected the assistance of bots to help him carry or lift the heavier components. Instead, he did as much work by hand as possible in order to strengthen his involvement into the modification work.

His dedication to his work had not gone unnoticed. Iris paused in her work of installing the neural interface systems to ask him a question.

"You don't need to lift everything by yourself, Ves. Bots can do the same thing as well, you know? You only need to check their work afterwards if they left some discrepancies."

"It's not about efficiency. Otherwise I would have listened to your suggestion or let some mech technicians do the heavy lifting. It's about dedication."

"Dedication?"

"Yeah, it's..." Ves briefly paused his work to look at Iris. Should he tell her something like this? It hinted strongly towards one of his secrets.

He decided to keep it vague.

"It's about remaining involved through every step of the way. Without implementing my proposals by my own two hands, how can I know whether they will work as planned? With me on hand, I can instantly recognize if something doesn't pan out the way I want to. This way, I can insure I will deliver the highest quality possible. That's the true meaning of dedication."

His words put Iris to thought, but only for a moment. While Ves spoke the truth, it was only a small portion of what he was really after. He hoped that Iris

would quickly dismiss his words as wishy washy aspirations and go back to her work.

Instead, she smiled at him and spoke out her own thoughts. "You know, I've always had a feeling that mech designers don't do too much on their own. You're the first person who put my feelings into words. I always felt better about the mechs which I personally worked on. Now I understand a little. Thank you for that, Ves."

Ves wanted to palm his face. It wouldn't have been so bad if he mentioned this point to Alloc instead of a Vesian.

The more he worked by her side, the less her identity mattered. They were both mech designers who respected each other's competences.