Mech 641

Chapter 641 Glory and Ruin

Ves understood that he had entered into a negotiation with Mayra. The pirate mech designer wanted something from Ves.

While she could have put Ketis under the tutelage of any other pirate mech designer, hardly any of them possessed the foundation and experience of a legitimate mech designer, let alone an aberration like him!

Before the conversation turned into this direction, Ves hadn't obscured his own background. Though he attempted to understate his accomplishments for fear of sparking any suspicions, his meteoric rise nonetheless marked him out as a mech designer with a bright future ahead of himself. It was no wonder that Mayra thought favorable to him to the point of wanting to put Ketis under his wing.

As long as Major Verle and Professor Velten cleared the decision, he wasn't opposed to the decision. In fact, he even figured the exchange of favors might tie the Swordmaidens closer to the Vandals.

The two had almost nothing in common, so accepting a guest designer might help ease the friction between their forceful marriage.

In addition, the main prize was a grand one. Even a casual glimpse in the principles of modern stealth tech would be enough to form a beacon in the dark. As long as Ves became familiar with the overarching concepts, he could figure out the exact science behind their applications on his own. Naturally, he preferred it if he could get his hands on more than just a taste. The more details he obtained, the less gaps he needed to fill.

He realized that he had the upper hand in this negotiation. A successful mech designer like Ves was hard to come by, and while he was too young to be a proper mentor, Mayra didn't expect him to teach Ketis everything. Teaching

her the essence of their profession was something he could do in his sleep, and if Ketis showed a little more enthusiasm that would have been perfect.

Therefore, Ves wasn't in a hurry to agree. He also identified a very big caveat in Mayra's offer.

"All you've told me so far is that the Skull Architect possesses knowledge that is useful to me. But what about you?"

Mayra awkwardly shrugged. "My mentor hasn't seen fit to impart me with an understanding in stealth tech. He does not spread his teachings lightly, let alone on a sensitive matter such as this. However, as a former student of his, I can introduce you to him and beg him for a favor. As long as you make a persuasive case, he won't object to showing you a trick or two."

Ves looked at Mayra as if she had lost her mind. "So you only promise to get me in touch with the Skull Architect, and that's it? Let's not mind the fact that you want me to talk with someone who earned the ire of the MTA, I don't see why a Senior Mech Designer would want to waste his time with me. I doubt that either of us can offer anything meaningful in exchange."

"I admit, it's not the guarantee you are hoping for, but this is the extent of my reach. Do you know how valuable it is to receive a lesson from the Skull Architect? Many pirate mech designers knock on his door each day to be taken in as his student! With my help, you'll at least have a foot in the door!"

"Yeah, only for the door to slam into it as it closes. The opportunity you're dangling over my head doesn't interest me. I already have a teacher, and I have access to many channels of knowledge. I'm not particularly eager to get in touch with a fugitive, and if it becomes publicly known that I did so, my reputation in civilized space will go down the drain."

That last point concerned him quite a bit, though unless someone possessed solid proof, Ves could still fight back to an extent. The effort would be too much, though, and some people would always harbor suspicions.

"Mr. Larkinson." She said seriously. "You'll be doing the Swordmaidens a favor if you accept. You may call us pirates, but we aren't ungrateful. Besides that, you don't have to accept my request if you fail to get anything out of my old mentor."

That sounded more reasonable, but Ves wasn't satisfied with just a single added condition. "What if I only partially succeed in prying something valuable out of the Skull Architect's grasp?"

"I can make it up to you. We have much to offer, from connections to other pirate organizations to entry in various black markets. You'll be able to obtain resources there that you won't be able to find in civilized space."

The pair discussed the details in hushed tones. While the Swordmaidens had access to various exotics and other resources that was in short supply in any other place, Ves had no need for these unique materials. Most of them would only be useful in special applications such as building high-spec components for expert mechs.

In contrast, Ves was much more interested in her offer to introduce him to various black markets. These were unlike the sanitized versions that did business in the Harkensen System. Gaining entry in these markets represented that Ves would be able to obtain much of the bounty from the Faris Star Region as long as he paid a sufficient price.

The banquet ended before they could go in on this topic. Ves sighed and stood up along with the rest. While Major Verle led Commander Lydia and their inner circle to a confidential meeting, Ves shook Mayra's hand. "It's a pleasure meeting you. I'll think about your offer." He said, hardly straining at the Journeyman's surprisingly powerful grip.

"Llkewise. If there is an opportunity, I will explain the matter to Commander Lydia and your superiors. If they assent to my proposal, we shall proceed from there."

Mayra left the dining room along with half of the Swordmaiden. The junior sisters among them such as Ketis had been left behind.

A mech officer stepped up. "Do you want to go get a drink? Have a spar or two? Or maybe both at the same time?"

"Bring us to what passes for your sparring ring!" A Swordmaiden spoke with a grin. Many of her sisters looked eager to test the mettle of the Vandals. She abruptly reached for her giant sword and unsheathed it from its floating scabbard. "If you have weapons that can match our swords, then that's great! If not, I suppose we can spar like our children!"

The more macho fellows among the Vandals took offense at her boast. For hours they tried to remain polite while the Swordmaidens challenged their masculinity at every step. The men wanted to show to these dangerous, exotic women that they weren't pushovers!

As for Ves, he shook his head and ignored the coming fiasco. The Flagrant Vandals was a military mech regiment. It's entire purpose revolved around fielding mechs. If the contest involved a spar between mechs, then Ves would put his money on the Vandals. Yet when it came to physical prowess, then he would put every credit on the Swordmaidens.

Their genetic modification was no joke! Subtle ones allowed humans to retain their appearances, but the tradeoff was that the effects were weak. More drastic changes inevitably introduced a change in phenotypes. In other words, the alien traits became more dominant to the point where the weaker human traits started to lose ground.

The more alien a hybrid looked like, the more their strength and attributes resembled the alien they borrowed their genes from! Naturally, the risks became greater at this point, as hybridization often proved to be irreversible. A poor match of genes could have unpredictable and extreme results!

It was the number one source of insanity among the upper class!

"Lydia's Swordmaidens are playing with fire. They should take care to learn from the lessons of the Age of Conquest."

Hybridization became increasingly prevalent among those who could afford to undergo such treatments. Back then, the enthusiasm for shedding the limited human form had led to a race among exobiologists. They developed radical new patterns without taking the time to understand the repercussions of what they offered.

Many of them might grant powerful physical or mental enhancements, but they also introduced radical changes in behavior. These changes required decades of formal trials to identify, but the freewheeling market of genetic modification couldn't afford to wait that long for a new product to be released!

"What happened next was a disaster."

Entire swathes of statesmen and admirals became power hungry and belligerent! A president of a third-rate state might abruptly declare war against a powerful second-rate state. An admiral might order the annihilation of a highly-populated planet because of a perceived insult from its rulers.

"The Age of Conquest is a time in human history when mankind conquered the aliens. It is also a time where aliens have conquered man." The unsurpassed achievement of conquering half the galaxy, only to suffer genocide of their own making when alien genes turned the ruling class insane represented the duality of this past era.

From the brink of success, to the brink of annihilation, many humans who lived today often sighed about this complex time in history. What would have happened if regulators reined in the exobiologists and geneticists? Would humanity end up as the only space-faring species in the galaxy if they hadn't turned their genocidal instincts inwards?

As Ves exited the dining room and walked back to his office compartment, he wondered whether this proposal was a good idea in the first place.

"Associating with someone who's called the Skull Architect isn't exactly the most prudent career decision."

He already had the System, the Clifford Society and Master Olson to assist him with mech design-related issues. Though it appeared he was spoiled for choice, all three channels came with caveats, and access to them could be taken away from him at any time.

"A crafty rabbit has at least three burrows."

Anything could happen in the future. If Ves ever suffered a similar fate to the Skull Architect, then at least two of his burrows would collapse while the third one likely couldn't help at all. If nothing else, even if the entire galaxy hated his guts, he could always find shelter in the lawless frontier.

"Preparing a fourth burrow won't take too much effort. If I can take advantage of the circumstances and establish ties with one of the power brokers of the Faris Star Region, then I'll have a firm footing in the underground."

Ves received a lot of warnings about dealing with the underground when he studied mech design. Many of his colleagues fell to easy temptations put out by seemingly generous pirates. Once the mech designers found themselves in their clutches, it turning out the sweet offers had been nothing more than a lure. Those unfortunate mech designers became permanent 'employees' of those pirate gangs, and were generally never heard from again.

These unsavory stories illustrated the double-edged nature of becoming involved in the underground. Everyone was out for themselves, and the rule of law and the sanctity of contracts held no sway here. Without sufficient strength and cunning, one would always be a victim of one of the sharks that trawled the frontier regions.

This was also why he didn't immediately agree to Mayra's proposal. Even if he was a mech designer, Skull Architect Jimenez was one of the biggest sharks in the sea of stars! A careless gesture might earn his ire, or worse, trigger his obsession!

"This fugitive killed thousands of mech pilots, and went as far as butchering an expert pilots and pull out his bones to incorporate them in one of his mechs!"

That particular blend of madness spoke of extreme irrationality that was the bane to any mech designer! Basically, any interaction with the Skull Architect would be fraught with peril! Who knew if he turned some kind of switch in the Senior's addled mind!

The risks would surely quadruple in his case because of his hidden specialty! What could Ves do if the Skull Architect somehow managed to discover the truth behind his work!

Ves therefore felt leery about contacting the Skull Architect in the first place. If the X-Factor hadn't been so difficult to define and understand, Ves would have never entertained the offer in the first place.

Chapter 642 Dowsing Rod

"Still.. With great risk comes great reward. What If I turn this equation around?"

Another way of looking at this risky opportunity was that Ves held the key to the Skull Architect's lifelong obsession!

If Ves wielded his absolute advantage in this poorly understood field with finesse, then he might be able to extract a lot of concessions from the Skull Architect!

As an influential mech designer in a region of space where Masters didn't exist and capable mech designers were in short supply, the Skull Architect should be one of the region's peak characters.

Gaining access to this channel should be a boon to him. It added another contingency option to him should his other channels prove to be useless. Forming a relationship, however faint, to the Skull Architect would enable him to establish a foothold in the frontier.

He needed to be exceptionally cautious, of course, and it wasn't a given that he could arouse the Skull Architect's interest. Ves had to balance between offering something of interest while keeping suspicions to a minimum.

While Ves contemplated his this thorny issue, elsewhere various people gathered.

In the secured conference room aboard the Shield of Hispania, a small gathering of Vandals and Swordmaidens held their breaths as their leaders brought out a number of hand-sized encrypted data chips from a locked container.

For some reason, Lord Javier of House Eneqqin was there as well. The lone Vesian noble's presence should have been a cause for alarm, but right now it appeared he had shed his shackles entirely.

"Hurry up and place them together." He impatiently urged. "I want to see what all the fuss is about!"

Major Verle and Commander Lydia placed each of them onto the table in a certain way. Each data chip was shaped like a pie slice with a truncated tip. A magnetic force slotted them next to each other, forming a bagel-like circle that hummed as if hidden mechanisms roused themselves from sleep.

The Flagrant Vandals contributed five encrypted data chips, while Lydia's Swordmaidens surprisingly brought out six of them! The Vandals labored so long to gather this much data chips, yet the Swordmaidens seem to get their hands on them without too much issue!

Certain goods were much easier to obtain in the frontier than in civilized space!

"Something is happening."

Glowing purple lines emanated from the circle of data chips. Strange digital sounds beeped from the amalgamation, and suddenly the seams between the stupendously resilient housing of the data chips started to melt and fuse together!

They had tested the durability of the external housing, and according to their estimations, it was strong enough to survive a supernova! Yet now it easily gave way to each other!

It was as if this device had once been whole. The appearance of the fused circular object radiated a sense of completion, enchanting everyone present in this meeting. After a couple of seconds of internal adjustments, a projection sprang into being from the circular object.

"What is this?" Mayra asked with furrowed brows.

Lieutenant Commander Soapstone gestured for calm. "Be patient. The projection may be in a transition state. We have no way of knowing what advanced technology is at work here."

"Whatever is going on, that sure as hell doesn't look like a star chart." Lord Javier said with a sardonic smile. "Maybe it's a giant middle finger from the Starlight Megalodon."

Major Verle furrowed. After all their efforts into gathering eleven encrypted data chips, they did not appreciate any pranks.

The projection cycled through incomprehensible geometric shapes. Perhaps they formed lines of codes, perhaps they could only be interpreted through math, but whatever the case, nobody present understood a single piece of what was being projected.

Finally, the stream of shapes and symbols disappeared. What emerged out of the fused object was a single shape whose meaning was clear to everyone.

"It's an arrow." Lord Javier stated the obvious. "Where is it pointed at?"

"It's pointed towards the frontier." Commander Lydia stated. "This isn't a star chart. It's a star compass!"

The Vesian noble snorted. "For a compass, it's rather wobbly. Did you bump the data chips around or something?"

"The only other answers are that the location is in flux, or that the shaking is intentional." Captain Rakeshir said.

Everyone took in the implications of these possibilities. The crashed battleship didn't make their hunt any easier!

Eventually, Major Verle sighed. "The purpose of this star compass is clear. We need to bring to follow its direction and bring it closer to the coordinates of the Starlight Megalodon."

At this point, if the people present recorded the wobbly arrow and extrapolated the direction it pointed at, it would have included an expanding cone of space that was roughly two degrees wide! A cone of two degrees didn't sound very much if the compass pointed at something a couple of meters away. It was sufficient to pick out a single person out of a small crowd of people.

Yet it was a different matter in stellar navigation! The two degree cone encompassed an increasingly wider area of space, to the point of enveloping billions of stars as it ceaselessly expanded towards the edge of the galaxy!

The limitations of the star compass forced the Flagrant Swordmaidens to wield it as a dowsing rod. Like looking for a source of water in ancient times, they needed to bring it closer and closer to the point of origin. The smaller the distance, the more stars they ruled out. Eventually, they could come close enough to narrow down the exact star the device directed them to go.

Nobody questioned the convoluted hoops they had to go through. Neither did they voice the doubts they might harbor about the authenticity of the encrypted data chips. The Vandals and the Swordmaidens had no say in the matter.

All they needed to do was to follow orders. Even if they thought they were chasing after a unicorn, they would do so wholeheartedly because that was what their bosses expected them to do. Out of all of them, the only free agent might be Lord Javier.

The cocky young noble smirked at the complex looks of the people attending this meeting. "Not what you expected, huh? Just face it! Whoever is in charge of the Starlight Megalodon is playing us like puppets on a string!"

"Enough." Verle spoke calmly. "Let us chart our next course. If nothing else, we are no longer blind to where we must travel."

As the Vandal and Swordmaiden officers hashed out a route, elsewhere other factions were making their moves.

In the Hafner Duchy of the Vesia Kingdom, a recently elevated baroness awaited the arrival of an august guest. The person she was meeting stirred up a lot of controversy from her arrival. She disappeared from the radar soon after, and only a handful of people knew who she wanted to meet.

Captain Relia Foster wore her Hostland Warriors uniform as she sat in a secure meeting room several kilometers underneath her mansion. Countless passive and active jamming devices worked their magic, making sure that not a single sensor would be able to resolve anything useful.

The heavy door opened, letting in two very different figures. The brown-haired girl who sat at the head of the table stood up. She ignored the major accompanying the meeting and addressed the resplendently-dressed blond noble. "Welcome to Becham III, milady. I apologise for the drab interior, but there is no other room in my estate that can accommodate your demands."

Lady Amalia smiled politely. "Nonsense, Baroness Foster. I am aware that my arrival came too sudden for you to prepare. It is no matter. I am not here on a social call."

Lady Amalia took one of the two prepared seats. Both the room and the furniture consisted of simple alloy furniture, which looked in stark contrast to the luxurious furnishings of the mansion proper.

The simpler the furnishings, the harder it was to hide any spying bugs.

Major Jameson pulled out a handheld multiscanner and scoured the entire room, not sparing the noble baroness either. The device tested the effectiveness of the jammers and sought out any anomalous signals.

"This room is secure." He concluded after a few minutes, and shut down the device before standing behind his superior. "We may begin."

"Very well." Lady Amalia said. "Let us get down to business. My time is short and the Hafners are trying to track me down. It won't do either of us good if we are caught together, baroness. May I call you that, or would you prefer to be called Venerable or Captain?"

Relia Foster wrinkled her brow. "Please call me Captain Foster. I see myself as a mech pilot first and foremost."

"Not just any mech pilot. An expert pilot, and a young one at that. Everyone in Hafner believes your future is boundless."

The expert pilot shook her head. "I lost. There is no glory to be found in my bone."

"There is no need for you to be so depressed. If it wasn't for the freak chance of those marauding Vandals dropping into the Nova Migolatus System, then your debut battle as an expert would have been in a mech tailored to your ability. I believe the Hostland Warriors have recently completed your custom mech, am I correct?"

"My Belisarius has recently finished its trials." Captain Foster replied without qualms. "The mech designers require one more week of final adjustments before the Belisarius is declared safe to deploy in limited engagements. It will take months or years before my hybrid swordsman mech is able to match another expert mech."

Due to Venerable Foster's ignoble defeat and ransoming at the hands of the vile Brighter hooligans, the Hafner Duchy made a big show out of publicizing the formation of her first custom mech. They invested a generous amount of funding, research and even allocated a team of three Senior Mech Designers to head the project.

The extravagant amount of resources and attention put into the design and fabrication of the Belisarius raised everyone's hopes about Venerable Foster's future performance. Her talent had been stymied due to piloting a generic

training mech back on Nova Migolatus I. With the Belisarius at her disposal, she would never be limited by her equipment ever again.

"I find it interesting that your custom mech is named the Belisarius." Lady Amalia prompted. "Does it refer to what you wish to attain? I'm afraid your hopes may never be fulfilled. The Hafner mech legions have never been deployed to war against the Bright Republic. The Reinald Republic is much closer at hand, and due to the recent instability in their territory, we must be more prudent than ever against those short-sighted profiteers."

"Lady Amalia, please be more succinct. As you have said, others are on the lookout for a direct descendant of the Duchess of Imodris. The sooner you leave my premises, the better off we shall be. I have no desire for my loyalty to Hafner to be put into doubt."

"Very well." The Imodrissian noble held out her hand. Major Jameson retrieved a secure data pad from his uniform coat and handed it over to his superior. Lady Amalia passed the data pad over to her host. "I have a mission offer for you. The details are sparse, but the importance of this mission is paramount. Please take a look at its contents."

Captain Foster quickly perused the contents of the data pad. It only contained a single encrypted document, and it amounted to only a couple of pages of mission parameters.

She immediately spotted an alarming detail. "This mission is issued by the royal family!"

"This matter goes beyond the interests of Imodris and Hafner." Lady Amalia smiled. "While we cannot reveal too much to you at this point, know that our perilous journey to the frontier will not be in vain. If nothing else, the odds of encountering your hated foe is very high. We are competing after the same objectives, after all. We have already confirmed that half of the 6th Flagrant Vandals of the 3rd Tarry Mech Division of the Mech Corps is on their way towards the frontier. What's even more salient is that this Vandal task force has teamed up with a frontier pirate gang called Lydia's Swordmaidens."

The instant Lady Amalia mentioned the magic word, Venerable Foster grew heated. She gritted her teeth and gripped the data pad in a crushing grip. "Pirates!"

"We are forming our own task force. It will be comprised of elements of my 2nd Calico Dancer Bats and my 1st Meandering Monkeys mech regiments. Due to prior commitments and obligations, we are unable to bring our expert pilots. My task force has room for an exceptional expert pilot such as you. Are you interested in taking part in our mission?"

Venerable Foster offered a grim smile to the highborn lady. "Do you even need to ask?"

Chapter 643 Craft, Art and Science

The day after the banquet, the Flagrant Vandals and Lydia's Swordmaidens hadn't killed each other yet. Though the Vandals still smarted from their abject defeat against the Swordmaidens in the sparring arena, neither side went over the line.

Mostly, the Swordmaidens succeeded in cowing the Vandals into keeping their hands to themselves. If they intended to frighten the wits out of them, the women had definitely succeeded.

The top leaders of both forces held confidential talks up until the late night shift. Besides their inner circles, the rank-and-file remained wholly ignorant of the substance of their talks.

The Flagrant Vandals were already accustomed to secrecy, while the Swordmaidens generally let others do the thinking.

In any case, both the leaders and their subordinates seem to mesh adequately with each other. Though tensions would doubtlessly flare if they remained confined in a single room, there was no issue with remaining polite to each other. As long as neither side felt the urge to shook or chop the other side in half, then sufficient progress had been made.

Neither Commander Lydia nor Major Verle expected their subordinates to become friends with each other. The differences in background, culture and goals prevented them from growing too close.

They hadn't solved their problems concerning coordination either. The two adopted completely different command styles. While the Vandals expected orders to be carried out with a measure of interpretation, the Swordmaidens mostly didn't bother with complicated maneuvers at all!

Instead, the Swordmaidens generally followed those they trusted. Relationships were tight between the sisters, and the officers among them enjoyed sufficient prestige to command the women.

Following the orders of others was out of the question. Even if the Flagrant Vandals knew what they were doing, the Swordmaidens never placed their trust in others. People from the frontier learned early on to never place their trust in others.

When the Swordmaidens departed from the Shield of Hispania, they left a couple of liaisons behind. Mayra somehow managed to convince his bosses to leave Ketis under his care. She promised to get in touch with the Skull Architect as soon as possible, but he was a difficult man to get ahold of, so arranging a meeting took some time.

"What will I do with you?" He sighed as he greeted Ketis in the morning. Major Verle acted entirely too nonchalant about the liaisons. Besides preventing the Swordmaiden mech designer to get in touch with classified Vandal secrets, Ves received broad discretion over how he treated her. "Well, at least you're not the first guest designer that I've brought under my wings."

He still missed the company of Iris Jupiter. The Vesian rebel was smart and tactful to the point where Ves regarded her as his equal. Her insights into neural interface technology granted him a crucial inside look in a sensitive field among mech designers.

The difference this time was that Ketis likely didn't know anything useful to him, at least in the area of mech design. As a recently graduated Novice, she was at the stage where learned the basics but lacked practical experience.

"Tell me about your studies." He began. "Mayra explained to me that you've been tutored by her, right?"

Ketis nodded. "I didn't go to any fancy school. They don't exist in the frontier. Mayra made me go through virtual classes from the galactic net. According to her, I've passed enough classes that would make me graduate from respectable mech university."

"I see." Ves did not put much stock in that achievement.

The quality of virtual classes tend to approach the lowest common denomination. That wasn't to say that it was impossible to become a mech designer through these classes, but studies from the MTA had shown that people who depended entirely on virtual learning never advanced beyond the Apprentice rank.

Anyone could cram the basic fundamental sciences required to become a mech designer. However, without practical experience and the imparting of the more esoteric aspects of the profession, knowledge alone couldn't elevate a bookworm into a designer of mechs. It just made the recent graduate smart in some of the sciences.

This was why there was such a drastic difference between the higher institutions. The Rittersberg University of Technology where Ves had graduated from was almost as worthless as the virtual classes that Ketis took.

The key lay in the fact that mech design was a craft. In other words, it involved art as well as science. Many people bandied about this expression without realizing what it actually meant, but this crucial statement expressed the duality of learning how to design a mech.

It wasn't enough to memorize a lot of books!

This complexity distinguished the good schools from the bad ones. Rittersberg may be the capital of the Bright Republic, but it couldn't hold a candle against the Ansel University of Mech Design on Bentheim when it came to raising successful mech designers. And this was also why many mech designers dreamt of attending the Leemar Institution of Technology in the Friday Coalition.

Therefore, Ves had good reason to doubt Ketis' qualifications. Still, she might possess a redeeming factor. Enjoying the personal tutelage of a Journeyman Mech Designer was an advantage that many would fight over. Depending on how well Mayra had taught the craft to her protege.

Ves briefly developed a plan on what to do with Ketis. First, he needed to take stock of her abilities. "I'm sure you know the basic sciences. What I don't know is if you have what it takes to design a mech."

"I'm not a kid anymore, you know!" She barked, brandishing her fists. Ves unconsciously stepped backwards, afraid she would abruptly release her sword from her scabbard. "I've passed all my classes! I've serviced hundreds of mechs! I watched Mayra design and tweak the Misty Slasher and her other designs for years! Let me do some real work for a change!" "Calm down. If you think you have what it takes, prove it then. Let me put you to the test."

He guided her over to the empty desk in his office that used to be manned by Iris. Ves activated the terminal, registered it to Ketis, and opened up a mech design suite. After a brief moment of thought, he decided to load in an old and familiar mech design. He couldn't expose the detailed design schematics of the core Vandal mechs to a guest, after all.

"What design is this? It doesn't look like anything the Vandals use."

The gaudy and heroic-looking Caesar Augustus appeared on the projection. The majesty of the mech stood in stark contrast to the more down-to-earth and practical designs of the Vandals. Naturally, the coating had a lot to do with it as well. The Caesar Augustus gleamed in angelic white while the Vandal mechs all looked as if they reveled in chaos with their black and red color scheme.

"This is the Caesar Augustus, a lastgen landbound medium hybrid knight." He said. A mech designer like Ketis should instantly be aware of what this word soup meant. "It is one of the first mech designs I've worked with in my career. Even though it's a severely dated mech, it still uses the same modern design principles of today. Like all hybrid mechs, its internals are exceedingly complex."

"What do you want me to do with this shiny mech?"

"For now, I'd like you to design a cheaper variant of the Caesar Augustus. I'll supply you with the HRF armor system. I want you to utilize it in place of the base model's original compressed armor. You have one week to try and do your best to improve upon the attributes of the original design. I'll be able to get a good impression on where you stand after you finish your variant."

"Hmph. This is a waste of time. You're just trying to fob me off!"

"Look, Ketis, without knowing what you are capable of, it's irresponsible for me to let you loose on the shop floor. Prove to me that you're capable, and I will skip the kiddie stuff and involve you with real design work."

Once he dangled that carrot in front of her face, Ketis became a little more amenable to the test. She still held little respect for Ves, but he wasn't out for her approval anyway.

The horned young woman began to manipulate the projection of the wireframe model of the Caesar Augustus with her fingers. Ves nodded with satisfaction. He wouldn't have to worry about Ketis for a week.

Ves returned to his own work. He hadn't forgotten about his main responsibilities, and he also had to free up some of his free time on his side projects.

First, he held a conference call with his deputies and the other high-ranking mech designers. Besides getting apprised of routine matters, the larger concern of preparing the mechs for high-g operations dominated the meeting.

"It's too difficult to optimize all of our mechs to withstand five or six g's without protection." Mercator said. "We all tried our best but some of the mech models the Vandals have stolen from the Vesians are simply just that bad."

Ves was not amused with such an excuse. "I'm familiar with every mech model in our stables, and none of them are as ramshackle as you think. It's more likely that sloppy maintenance and deviances from the base model is to blame here. I'm not going to wipe your own buttocks because you're too lazy to do it yourself."

He briefly called up the mech models his deputies found problematic and quickly marked out some red flags. "The components I've marked out all look like questionable modifications to me. I don't know who came up with them, and I don't care. But right now they act as the first points of failure to these mechs. Instead of trying to preserve this sloppy work, why not revert it so you the mechs can actually withstand heavy gravity for more than a few hours? Working away these weak points will strengthen the mechs outside heavy gravity as well, so it should have been done yesterday as far I'm concerned!"

Modifying mechs depended heavily on the skills and experience of the mech designer in question. Just as in the case of designing a variant, modifications involved many tradeoffs. The key was to pay as little as possible while gaining more in return. Not every mech designer was as adept at juggling this equation.

"Let me make myself clear to you." He emphasized. "Stability is more important than pushing the limits of the mech frames. In an extreme-g environment, damage from wear and tear is magnified. It's as if you are carrying five times your own body weight for days or weeks on end. This isn't possible for humans, and the only way we manage to do so with mechs is because they are mechanical. As mech designers, we have the luxury of changing its properties. However, the changes we make are situational. What works best in standard gravity might instantly collapse in extreme gravity conditions. If something like this happens, it's okay to revert to an older state."

Ves felt kind of peeved that he even needed to explain this custom. Some mech designers thought that any improvement in the specs should be enshrined in their own temples. Their improvements to the mechs served as a way to validate their importance to the mech regiment. They didn't have access to any other means of comparing notes to each other, since none of them were allowed to design their own mechs.

Unlike these snowflakes, Ves cared little for their inventive solutions. The Vandal mech pilots deserved better.

Someone raised his hand. "I have a question, Mr. Larkinson."

"Go ahead."

"Why are we moving away from the war? The Vesian offensive against our borders has almost run out of steam by now. The perfect time to make a counterattack is close!"

This question again. Ves shook his head. He entertained numerous questions like this all the time. "The answer is the same as always. That's need to know and you definitely don't need to know."

Morale had already started to slide among the crew. The doubts didn't linger solely among the mech designers. Every other Vandal grew more skeptical about their mission. For now, there wasn't any way to placate the men. Ves could only hope that the Vandals wouldn't be pushed to the brink of mutiny.

"That's all for today. Now get to work!"

Chapter 644 Another Tes

Time passed by as the Flagrant Swordmaidens made their way out of Reinald space. Along the way, they ditched the loot they obtained from the Masters of Combat at a Reinald stopping point.

Commander Lydia's connections with the Reinald Republic proved useful here. She enabled the Vandals to cut through the red tape and complete their transactions within a matter of days.

The Vandals used up their extra funds to load up additional supplies. Ves prioritized the stockpiling of rare materials, as it would almost be impossible to obtain them in the frontier. The fleet also stockpiled entire tanks of ship-grade fuel, perhaps anticipating that the journey up ahead would be a long one.

In between her design assignment, Ketis proved to be a useful source of information on the frontier. "Fuel is one of the most precious resources in the Faris Star Region. There's no shortage of gas giants and planets where we can extract the ingredients to synthesize the fuels, but the problem is that we can't defend most of them. If pirates pass by the harvesting facilities for some reason, the sandmen will come across them sooner or later."

"How do you get anything running in the frontier then? Every starship runs on fuel. Every shuttle requires fuel as well. Even mechs run on fuel, though not always directly. Direct energy cells are charged by reactors that run on fuel. So in short, how can anything be run if there's no fuel production?"

Ketis blinked a bit, as if Ves asked about something that was common sense. "The major pirate factions all operate well-defended fuel refining operations. That said, most of our fuel is imported from civilized space. We pay at least five times as much as you do for fuel out there!"

The price of lower-grade fuel was never a big consideration in civilized space, but if Ves suddenly had to five times as much for the same amount of fuel, he'd go crazy.

It initially sounded like a ripoff, but Ves knew that the forces of supply and demand was at work. Exporting bulk materials like fuel required massive tanker ships that were awfully slow and easy to attack. Providing a sufficient amount of escorts to keep them safe in the lawless frontier was costly in itself. The massive distance involved also increased the risks of encountering a mishap. If anything went wrong, the nearest help would definitely be many light-years away.

So upon second thought, it wasn't such a big surprise that the price of fuel reached so high. The only issue that Ves couldn't wrap his head around was how the pirate gangs in the frontier managed to operate with that much upkeep.

"Since fuel is so expensive, how are you able to keep running?"

"We pay favors. We make friends with the factions that own their own refineries. We loot something from the treasure hunters that you civilized folk

always pay a lot of money for. There's lots of ways to make money if you don't have to abide by any artificial rules."

That was true. The untamed stars largely remained unexploited. Exploration of the Faris Star Region alone had only reached the tip of the iceberg so far. Treasure hunters who managed to hit the motherload tended to hoard the coordinates of their cash cows. The secrecy surrounding their exploitation of these treasure stars meant they needed decades or centuries to deplete the natural bounty of those prized locations.

Once something happened to the treasure hunters, those hidden stars might fall into obscurity again, only to be uncovered again when the next batch of explorers encountered it. In short, opportunity could be found in any corner of the frontier. The problem was that anyone could take away your assets and your gains.

Without the protective umbrella of a state, stealing became the norm rather than the exception. Weaker outfits constantly endured bullying from the bigger players. The only way to escape this fate was to befriend the major factions on your own initiative.

"When the Swordmaidens started off, Commander Lydia faced a lot of difficulties due to this." Ketis explained. "It was worse for her because she insisted on recruiting women."

"So she tried to make friends, I gather."

"Receiving the backing of a major faction is the way to go. As long as you aren't too useless, you can earn their recognition which allows us to wave their name around whenever we come across a rival."

"Does that recognition cost anything?"

"A lot. We have to pay a lot of tribute and give them a hefty cut of our earnings. It's not even worth it as some of our enemies don't pay any heed to

our backers. That's where our strength comes in. The best way to protect ourselves is to be scary enough on your own. We've become quite good at that over the years."

This also explained their posturing at their first formal meeting. The dramatic show of strength and aggressive attitude served to deter others whenever they met a new outfit. Over decades of performing the same song and dance, it became an ingrained habit to them. The line between theater and reality became blurred.

"What is the end goal of the Swordmaidens?" Ves asked, genuinely curious why the Swordmaidens risked their lives every day to make a living in the frontier.

Ketis eyed him with a sour expression. "That's none of your business. If you really want to know, then ask Mayra or Commander Lydia. It's not for me to tell."

That ended this particular line of questioning. While Ves expressed curiosity on the reason that drived the Swordmaidens to such devotion, he figured he would stumble upon it sooner or later.

Later that day, Mayra finally contacted him. The Swordmaiden mech designer called him up from Jaded Sword, the flagship of the Swordmaidens. The Jaded Sword was an angular combat carrier that specialized in quick orbital insertions through hostile territory.

"There's good news, Larkinson." Mayra began as soon as they established a communications channel. "I've managed to get in touch with the Skull Architect."

"What did he say?"

She sheepishly shrugged. "Well, he's not pleased with me for attempting to introduce a random Apprentice Mech Designer to him. He's a very busy man,

and he's involved in the middle of a major project. He's not even willing to chat with an old student like me. His attitude can be impatient and prickly at the best of times."

"That doesn't sound like good news." He frowned.

"Oh, you should see him when he's mad or when he's immersed in an important project. He can shut himself off in his labs for months on end. No amount of pleading can drag him away from his preoccupation. I'm lucky that I caught him at a good time."

"So what is his response?"

"Well unfortunately, he's not willing to spend even a single minute of his time to talk to you. You have to realize that many Novices and Apprentices in the frontier dream of obtaining his favor. Even with my recommendation, he refuses to take the time to give you a chance to make an impression."

Ves didn't expect the Skull Architect to be so abrasive, but perhaps that came with the territory of being one of the few prominent mech designers in the Faris Star Region.

He wouldn't like it either if hundreds of Novice Mech Designers knocked on his door every day to obtain some advice or begged to be taken in as his student. The higher one's position, the more people wanted to hug their thighs.

"However, you're in luck." She quickly said. "My mentor put forth an alternative. Mech designers like us can communicate with words or with mech designs. It takes hours or days for us to explain the specifications of a design, but it only takes a couple of seconds for my mentor to interpret a design from its design schematics. Do you get it?"

"I understand. Your mentor wants to judge from my work whether I'm worthy enough for him to take his time out for me. However, I'm not looking to be his student or anything. If he can just share some of his research on stealth tech, I'll be more than happy with my gains."

Mayra shook her purple head. "I've already tried. Stealth tech is too sensitive for him to give away. Not even I'm worthy enough in his eyes to receive this knowledge, so it's nothing strange for him to withhold it from you. According to him, he'll draw many formidable enemies if he disseminates this knowledge too widely. The handful of people who are in possession of stealth tech like to keep it to themselves."

"So the only other option is to earn his recognition." He sighed. "This is not what I expected. I wanted a way in. Instead, you brought me to the door and left me there to fend for myself. This exchange of favors really doesn't benefit me at all."

"Look, my recommendation at least got you a foot in the door. That has to account for something! That he has agreed to take a look at your design at all is a major concession on his part. Otherwise, he wouldn't waste his time on a junior of the profession. Even if the frontier is barren of talent, he attracts many mech designers that are even more impressive than you."

Ves closed his eyes. "Very well. I understand what a supposed amazing opportunity this is to prove myself. Let's get on to business then. How does he intend to test me?"

Mayra looked down at her comm and transferred some files to his account. "I've just sent you a couple of design schematics. They are some of my mentor's old designs."

"Let me see." He opened up the files and saw they consisted of various mech types. He quickly identified a major deficiency to the schematics. "They're full of holes. They're incomplete!" "That's going to be your test. Pick a design you're comfortable with and fill in the blanks with the best of your ability."

Ves felt as if this entire situation was a little surreal. A few days ago, he served a similar test to Ketis. Now, the Skull Architect utilized a similar method to scope out his mech design ability.

This also highlighted the usefulness of this method. Mech designers truly communicated better to each other through their designs than any flowery words.

"Am I allowed to modify the parts of the design that are already in place?"

"No." She shook her head. "The existing parts of the design is there to serve as your guide and your shackles. Working around the limitations and making use of the possibilities embedded in the designs is the main component of this test. The design choices you make and the design philosophy you impart in your solutions will say much about you. Do you understand?"

"I do. It's quite a convenient way to test a mech designer's ability."

Ves actually found this test to be ingenious in its focus. He should have subjected Ketis to the same kind of test instead of dropping a random mech design on her lap. Not only did it take a lot of time to design a good variant, the total lack of structure and guidance meant that Ketis might focus too much on areas that Ves didn't really care about.

He would definitely steal this method and use it for his own ends.

The two discussed some of the parameters of the test. The work he handed over needed to be a reflection of his own work. He wasn't allowed to involve anyone else. "He'll know if you attempt to cheat." That was all she said about the matter, and Ves believer her. The truly skilled mech designers possessed an extremely high level of discernment.

"Is there a deadline?"

"Not exactly. He hasn't mentioned anything about time limits, but he was probably too distracted or something. Taking too long will reflect badly on you, though, and you shouldn't forget about the communications blackout once our combined fleet crosses into the frontier."

That meant Ves had less than ten days to submit his attempt to impress the Senior Mech Designer. According to the planning, Major Verle and Commander Lydia intended to stop by at Mancroft Independent Harbor for a day or two. Once they loaded up their final supplies, they would formally cross over into the frontier.

At that point, access to the galactic net became a thing of the past.

Chapter 645 Mirror to the Future

"A test, huh?"

After his conversation with Mayra, Ves wasted little time. He dove into the design documents and identified five different mech designs. All of them appeared to come from the Skull Architect's hand.

"Compared to the test I've given to Ketis, this one is a lot harder."

Because Ves only needed to fill in the gaps, he didn't have to spend too much time on this test. Yet the missing areas all happened to represent the key structures in the design schematic. Filling them in directly tested his understanding and his style on the functioning of key components such as the engine, the power reactor, the internal architecture and more.

Every mech designer formed their own brand of solutions to the problems. Even though the exact parameters of their proposals might vary a little depending on what time they took the test or what their mood was like, in essence any single attempt would serve as a decent snapshot of their ability. The details might vary, but the broad strokes would always be the same.

Even if a pair of mech designers attended the exact same classes and studied the same textbooks, their design outcomes definitely differed drastically due to differences in their background, attitude and preferences.

"A mech designer's imagination isn't limitless. But it's enough to design billions of mechs, if not trillions."

To design a mech was to make a choice out of those nearly limitless possibilities. Knowledge expanded the range of possible design outcomes, but it took skill and experience to pick the better ones from a crowd of bad ones.

Before he tackled the test, he considered the nature of the test. Ves didn't forget about his primary objective. "I need to impress the Skull Architect in order to gain his favor. I can't go too far, otherwise he'll develop an unhealthy interest in my specialty. However, if I want to pry off his research on stealth tech from his grasp, I have to stand out from the crowd."

He grew a headache at the thought of balancing these opposing concerns. If he held too much back, then the Skull Architect wouldn't waste his time with Ves. If he revealed too much, then the next thing his brains might be cut from his body and be put in a jar for the Skull Architect to interrogate at his leisure!

It sounded like hyperbole, but Ves knew that the Skull Architect was truly capable and willing to resort to such extremes!

"This is the problem with obsessive researchers. You can't predict when they'll tip over from obsession into madness."

Ves regarded himself as a minor authority on this matter. Not only did he escape from Doctor Jutland's care, he also developed an early onset of

obsessive behavior. So far, it was harmless to Ves, but it might grow to a serious compulsion in the future.

He had a theory that all the mental attribute changes was to blame.

In any case, his familiarity with this issue gave him a good insight on the Skull Architect's perspective.

"The Skull Architect cares more about his projects than his relationships with others. He's even impatient to one of his former students."

This spoke of a personality that emphasized efficiency and utility. This wasn't unusual among mech designers. They needed to be fast and meticulous in their work.

Usually, balancing the two was impossible. One could either be fast but sloppy, or slow but meticulous. It took pure skill and dedication to elevate both at the same time. Someone who reached the rank of Senior was definitely a hard worker.

"Still, it sounds like the Skull Architect is severely affected by this condition. He sounds much more unreasonable than some of the others Seniors that I know of. Not that I met many of them, but the contrast is stark."

Two Senior Mech Designers stood out in his recent memory. The first one he had a conversation with was Horatio. The man should have enjoyed a lot of renown with his rank and ability, but for some reason he was content to play butler to Master Olson. Unlike the Skull Architect, Horatio always acted friendly and patient.

The second Senior he came into touch with was the old and faded Professor Velten. As the only Senior Mech Designer of the Flagrant Vandals, she was long past her prime and she had no business of leading the mech designers of an entire mech regiment by herself. Still, she was better than nothing, as hardly any Seniors wanted to work with the Vandals. While Professor Velten treated her time as if it was a precious commodity, she wasn't too stingy about spending it. Ves frequently got in touch with her to report on routine matters and to obtain some assistance on how to service certain complicated mechs.

Comparing their personalities to the Skull Architect only accentuated his eccentricities. This was a man who cared a lot about efficiency. If Ves incorporated anything unnecessary flashy, costly or time-consuming, he would likely fail the test.

"I've got to be efficient and economical in my design choices."

He moved on to the incomplete designs at his disposal. All of them seemed to be lastgen designs, and represented the Skull Architect's older works that have lost relevance in this day and age. Exposing them to those he wished to test wouldn't harm his current business activities.

Nonetheless, back then he was still a Senior, so the complexity and abstruse concepts that suffused the designs exceeded the upper bounds that Ves could cope. Strangely though, he didn't feel too pained when he studied the designs.

It wasn't due to the gaps.

"These designs are derivatives of more sophisticated versions. They're dumbed down to Journeyman-level!"

The changes the Skull Architect made for these test designs shouldn't have been dramatic. It was hard to achieve perfection, but easy to mess it up. The deliberate disorder broke up the inexplicable harmony of the designs, causing them to fall within the range of understanding to Apprentices and Journeymen.

This thoroughness spoke of the Skull Architect's dedication to detail. He already took every detail into account, and probably expected the same from those who wished to approach him. This wasn't anything radical, but it told

Ves that it wasn't enough to make a good attempt. He had to do it right without falling flat.

"Hmm, if I want to impress the Skull Architect, I shouldn't be messing about with things I don't understand."

Before he became known as the Skull Architect, he was known as Reno Jimenez, a versatile mech designer with a broad range of mech designs in his catalog. His specialty lay in the field of energy transmission.

What did this mean? It basically meant he cast his gaze on every aspect related to energy and how to convert it into actual power with as little waste as possible. Machines designed by mech designers who specialized in this field lasted longer on the same charge of energy cells and generated less waste heat.

This made them exceptionally suitable to design a variety of mechs that interacted heavily with energy and heat. The obvious mech archetypes that fell into this category were laser rifleman mechs and laser cannoneers.

However, a mech designer with a broad repertoire could easily put their strengths to use in other types of mechs. For example, aerial and spaceborn mechs generated drained a lot more energy and dealt with heat a lot more poorly than landbound mechs by virtue of their flight systems.

A specialist in energy transmission had a dramatic impact on the energy efficiency and heat management of a mech that utilized a flight system. What impressed Ves the most about Reno Jimenez was that he wasn't afraid of expanding his range. His specialty afforded him the luxury of choice, but many of his colleagues opted to remain within their comfort zones.

There wasn't anything wrong with sticking to the familiar. The competitive market environment forced mech designers to become really good at one type

of mechs. Some barely held on to their core competences while others branched out without suffering any consequences.

"Mr. Jimenez is one of the latter, it seems."

Ves considered his options.

"A landbound light skirmisher, a landbound heavy cannoneer, an aerial medium knight mech, a spaceborn light frontline mech, a spaceborn medium striker mech."

This range encompassed a wide variety of mechs without offering too many options. It wasn't a disaster to him if none of the options matched his earlier work. "The Skull Architect probably appreciates mech designers that can be flexible in terms of mech types."

The man's own mech catalog showed that he embodied this notion. If Ves ruled out his virtual mechs and his competition mechs, then his catalog of designs was woefully small. "So far, I've only designed four mechs, of which only two of them are original designs."

Though his recent ride with the Flagrant Vandals exposed him to an extensive amount of mechs, that was completely different as Ves was never involved in their initial design.

This was why he ruled out aerial and spaceborn mechs from his consideration. Out of five options, Ves was only left with two.

"It's a painful choice, but a necessary one. Even if I've studied up and received some tutoring on flight systems, that doesn't mean I'm an authority on this field."

Out of the two landbound designs remaining, Ves could either pick between a light skirmisher or a heavy cannoneer. The first choice appeared deceptively simple while the latter one inspired dread in its sheer internal complexity. In

fact, out of every design that the Skull Architect dumbed down, the heavy cannoneer had practically been butchered into a pale shadow of its former self. It looked kind of sad in its current state.

That also meant it was easier to correct. Ves already formulated a dozen possible solutions to fill up the gaps.

"Still.. Is it wise for me to touch upon a heavy mech?"

Heavy mechs formed a different class on their own in the mech industry. On average, they massed at least four times as much as a medium mech, and ran through so much energy that they could melt through an entire city district.

Such might and devastation exceeded the range which Ves could control. His virtual and realspace experience with heavy mechs was practically nil.

"Let's run with a landbound light skirmisher then. What are you called? The Leiner Grey."

Ves had never designed this exact mech type in reality before, but Ves could draw on many related experiences. From designing a virtual light skirmisher, to his extensive work on attempting to improve Inheritor spaceborn light skirmisher, to his broad range of experience in designing his original mechs, Ves could sample all of them and keep the ones that were relevant to this challenge.

He closed his eyes, letting his memories and prior experiences flit past his mind at the speed of thought. Picking out the useful portions and piecing them together provided him with an overarching framework that could guide his design work.

He happened to find the most similarities between Professor Velten's Inheritor design and the Leiner Grey. Though they operated in very different environments, they both shared the same level of internal complexity.

"The Leiner Grey's lack of flight system frees up a lot of internal space, but that is partially counterbalanced by the fact that its engine needs to be stronger. Overall, they aren't much different in that both mechs constantly struggle to squeeze out more performance out of a very limited budget of parts."

The higher the performance, the greater the mass and performance. This rule applied to almost every aspect of mech design. The Leiner Grey that was shaped from the hands of Reno Jimenez attempted to subvert this rule as much as possible.

"He was chasing after a paradox when he designed this light skirmisher."

Jimenez wanted to have his cake and eat it too. He attempted to create a powerful light skirmisher while keeping cost, weight and power draw to a minimum. Naturally, the design never lived up to his hopes, but the partial failure performed well enough to be a good seller in the Coalition market.

"The Skull Architect's standards are absurdly high. If this is what he considers a partial failure, what does success look like in his eyes?"

The man demanded perfection to an unrealistic degree, and worked hard to achieve this dream.

The more Ves became exposed to the Skull Architect's track record, the more he found himself echoing the Senior's past development path. It was as if the Skull Architect was what Ves might turn into if he followed the same steps.

A chill went down his spine. Was Ves destined to become a lunatic in the future as well?

Chapter 646 Thin Line

Ves awkwardly laughed. "That will never happen to me."

Those who stepped on the road to lunacy often denied that they were doing something wrong. As long as Ves remained self-conscious of himself, he would always be able to halt before he went off into the deep end.

Insanity and irrationality among mech designers occasionally popped up. Some say only a thin line stood between genius and madness. Those who advanced into Senior and higher often exhibited signs along that nature.

A couple of theories Ves had heard back in school state that mech designers attempted to perform the impossible. They wanted to break past the laws of physics and reality and pioneer new paths where none existed before.

If a Journeyman could be said to have finished his orientation and make his first steps on a chosen path, a Senior attempted to tread outside the boundaries of an existing path. Each mech designer started off by studying existing knowledge. However, to continue their studies at this height only locked them into a well-trodden path.

There was no novelty in imitation. One would only remain an inferior copy of a predecessor.

Senior Mech Designers mostly preoccupied themselves with stepping out of the familiar and exploring the vast unknown that was shrouded in fog. Almost every direction led to peril or a dead end. Some Seniors labored for fourhundred years and never managed to find their path to salvation.

The fog buried their bones and half-completed goals.

Only a small handful managed to explore the fog and successfully found a way out. They carved a brand new path for themselves that never existed before and lit a beacon so that others could follow.

There was something metaphysical about this whole description that mystified almost every mech designer who stumbled upon it. Many of his peers regarded it as gobbledygook, but as Ves became more exposed to the higher applications of mech design, he couldn't help but think back on this story.

"It is said that each mech designer that has forged a new path is capable of doing more than any others that follow in their footsteps. What they can design is sometimes described as magic."

Naturally, magic was simply a shorthand for scientific phenomena that humanity hadn't figured out yet. Over the years, researchers figured out the rules behind such feats and disseminated the newly discovered technology in the form of standardized theories.

Nonetheless, a Master gained a head-start over everybody, and always continued to be the leading expert in their specialty. With all the myths and psuedo-science being bandied about by younger mech designers, it was hard for Ves to discern the facts from hyperbole.

"According to this metaphor, the conflict hidden within the Leiner Grey design goes to the heart of the Skull Architect's struggle to find a way out of the fog."

Just as the Skull Architect sought to take a measure of Ves by observing his test results, so was Ves able to interpret the dreaded Senior's design philosophy. Best of all, the man did not obscure his research direction. In fact, he cut off the more abstruse and metaphysical parts of his design philosophy to make it easier to understand.

This told him another facet about the Skull Architect. "Awful reputation aside, he still possesses the heart of a scientist."

Each Senior was a scientist in a way. A scientist explored reality and advanced a scientific field. They created hypotheses, crafted a theoretical model and tested them through research. Fail or succeed, their results added to the collective body of knowledge of the human race. Of course, scientists were only human. The tendency to hoard their knowledge and keep their advantages to themselves was very strong. Ves was a typical example of this case. Even as he already trod new ground in a way by dipping his toes into the X-Factor and spirituality, he never thought about disseminating his discoveries to the wider universe, even if it would have earned him eternal recognition.

"For one thing, it'll paint a huge target on my back. For another, there's no reason why someone can't steal my work and take all the credit for themselves."

Too many things could go wrong, and Ves hid too many secrets. In some way, he was the polar opposite to the Skull Architect on this matter.

It relieved him a bit to recognize this difference.

In any case, finding out that the Skull Architect hadn't lost his roots as a scientist informed him of another way of catching his attention.

"A scientist is impartial. He is highly interested in his own areas of interest, not the least because results from another source can help him beat back the fog that obscures the possible exits."

Why did the Skull Architect become a criminal and a fugitive? It was because his inquisitive nature overruled his sense of propriety and his common sense.

He formulated a hypothesis, one which stated that incorporating human remains into the frame of a mech would improve its performance, and acted upon this inquiry by performing experiments. The Skull Architect completely disregarded the gruesome nature of the experiment in pursuit of the ultimate goal, which was to find a way to thread an impossible needle and create another miracle.

As for the human cost? That was the cost of progress!

"It's kind of scary to see how far one can go. I haven't even spoken to this infamous mech designer, and already I'm starting to have second thoughts about this venture."

Still, as long as Ves paid attention to his work, he shouldn't run afoul of anything nasty.

"A mech designer knows his own designs the best. Any anomaly, however minute, will instantly be picked up by him. I have to be really subtle about the secrets at my disposal."

His main concern on this matter was the X-Factor. Knowing that the Skull Architect willfully killed an expert pilot in order to test out an outlandish hypothesis related to this phenomenon, Ves shouldn't reveal too much.

"It's one thing if I enhance this quality in my own designs. It's unobservable to most people, so outsiders probably can't make out anything substantial. However, the moment I touch the Skull Architect's own design, not a single change will escape his notice."

Ves concluded that he needed to weaken his natural tendency to imbue his imprint onto the designs he worked with. Ordinarily, he did anything to strengthen it, coming up with the convoluted Triple Division Technique to focus his Spirituality to create a multifaceted spiritual entity.

Even if he didn't utilize this advanced technique, his singular concentration was sufficient to impart a simpler imprint upon his designs.

"Both methods are too strong. The complexity won't matter to the Skull Architect. It's the strength of the X-Factor that is the key. As long as it's strong enough for him to pick up its existence, it will instantly attract his full attention on me, which isn't good."

He needed to shape a certain magnitude of X-Factor just below the point where it would be noticed by his target audience. As long as the truth remained in the shadows, Ves would succeed in rousing the Skull Architect's unconscious desires just enough to elicit a follow up reaction.

To put it simply, Ves needed to hit the Skull Architect's face with a gust of wind instead of a sledgehammer.

Finding the right strength was a judgement call. Ves mentally went over to the spiritual strengths of his past designs.

He recalled that the System registered both of his Marc Antony variants with at least C+ grade X-Factor strength. That was too much in his eyes. Even the first Caesar Augustus variant he developed after the System introduced this secret carried a C- grade.

That had already been sufficient to kick virtual mech pilots in the butt.

"It has to be weaker."

Eventually, he decided to err on the side of caution and aim for a D or Dgrade. Anything lower transformed the X-Factor into a ghost. At that point, Ves might as well give up entirely.

"Now that I've decided upon that, let's get my hands dirty."

He focused his attention on the incomplete Leiner Grey and tried to keep his mind at a state of levity. He needed to avoid narrowing down his focus to prevent a spike in spirituality, but he also couldn't be too disordered either, or the X-Factor would turn into a muddy soup.

The main defining features of the Leiner Grey was that it attempted to be fast, strong and well-armored for a light skirmisher. Even a beginner mech designer knew how impossible it was to achieve such a result. At best, most light skirmishers tend to prioritize speed above the other two major attributes. They could afford to sacrifice mechanical strength and armor in favor of being as fleet as wind. "Light skirmishers are fast by necessity and because speed is all they need. Moving fast increases their evasion, allows them to outrun melee mechs and reduces the probability of getting hit by ranged mechs. As for strength, a skirmisher usually takes advantage of their superior mobility to hit mechs from their rear where the armor is weakest. If that doesn't work, they can always build up a lot of momentum and empower their charge with the weight of their entire mech behind their attack."

The logic behind light skirmishers basically stated that an absolute superiority in speed allowed the mechs to leverage this advantage in overcoming its traditional weaknesses.

"When you come down to it, this sounds like a moderately acceptable excuse to cover up the fact that light skirmishers have big holes in their designs."

A mech that was fast but was clad with paperthin armor only needed to suffer one critical hit to take it out of the fight. And having to go through all of that trouble to gain the opportunity to land a telling blow onto an opposing mech took too much time and effort.

"In comparison, a straightforward medium melee mech is better in any way except for mobility. Yet it is this deficiency that is the defining difference between the two mech types. They fulfill different roles and perform completely different on the battlefield."

The original vision behind the Leiner Grey unveiled in front of Ves. To put it simply, Reno Jimenez attempted to create a light version of a medium melee mech. The Leiner Grey was supposed to acquire all of the advantages of a medium mech while somehow retaining its overarching superiority in mobility.

Ves had one response to that. "Arrogant!"

He read the Leiner Grey's development path. The Skull Architect started off with a basic light skirmisher frame, and started adding in some extra bulk. The added mass slowed the mech down, so the designer compensated by increasing its energy consumption and magnifying the amount of power it could exert.

This couldn't go on endlessly. Soon enough, the Skull Architect hit a wall where climbing over it cost a lot more than he gained. To gain one percent in power, he needed to bulk up his mech by at least ten percent or more. That tradeoff simply sucked.

"If Mr. Jimenez can make it so that a single percent boost in power will only weigh down his mech by one percent, then he has definitely advanced to Master."

Such an amazing light skirmisher design was an impossibility. It's existence was as absurd as stating that 1 + 1 = 2.01 or something like that.

Yet Ves couldn't help but be impressed by the man's audacity. Almost everyone ruled out that a mech designer could reach this result, but the ambitious Skull Architect boldly forged ahead where none dared to tread.

"Seniors constantly attempt to turn lies into truth, fantasy into reality, the impossible into the possible. To many, it is a road that leads to madness, death or a dead end."

The danger stood in stark contrast with the prestige and renown these Senior Mech Designers usually enjoyed. Any of them held high positions, and even the least of them could easily find teaching jobs at a prestigious university. Society valued them for their esteemed abilities, but they could never fathom the risks they took to make further progress.

"What a scary mech design." He uttered as he mentally took a step back. "Just a single design is already able to tell me so much. This isn't such a simple test after all."

Chapter 647 Chasing a Unicorn

Even if Ves hadn't even made a single move yet, he already saw through another layer of the test.

It challenged his mental fortitude.

By showing him a glimpse of the ambitious impossibility the Skull Architect attempted to reach, Ves should have been scared off or dismiss the Senior as a nutjob.

"Is he, though?"

The Leiner Grey incorporated many aspects that Ves couldn't help but consider pure genius. Certainly, the temptation to learn from them and copy the tricks for himself grew stronger the more he dove into the Skull Architect's work. His progress in increasing the efficiency of his mechs had reached a height that Ves had never seen in any other mech.

"Damn, what am I thinking?" He shook his head. "This design is a temptation! If I didn't catch myself, I would have been converted to the Skull Architect's design philosophy!"

An authentic design from a Senior usually put pressure on the minds of junior mech designers, warning them to go no further unless they willingly threw away their paths to follow someone else's. The high accessibility of the Leiner Grey design somehow circumvented this defensive measure, causing those who become too eager to study this design to become full converts to the school of efficiency.

It was a naked temptation, and Ves couldn't help but question the Skull Architect's motivation for disseminating this design. "If I give in to the temptation, I would get a quick boost in my mech design ability at the cost of losing all of my previous progress. If I resist, I will still be contaminated, but it should be in a controllable range." The latter sounded negative, but what really went on was that the Skull Architect passed on some lessons to Ves. It was simply up to himself to ensure he didn't get lost in the abundance of what he learned.

He needed to remain clear-headed throughout his design work, but the problem with that would strengthen his concentration. If he muddled his head a bit, he could prevent the X-Factor from becoming stronger, but then the contamination gained the opportunity to spread.

Ves faced an implacable dilemma at this junction.

"At this stage, I can't afford to harm my nascent design philosophy. It is the core of my being and something that is wholly unique to me. The best path for me is the one that I forged on my own."

After some contemplation, he decided to maintain a slightly higher focus at the risk of leaving a stronger imprint on the test design.

Ves encountered no more surprises as he worked on the Leiner Grey. Perhaps it hid other secrets underneath its clean lines and dry specifications, but it there were any, Ves lacked the perception to pick up on them. The aspects he picked up already put enough concerns on his plate.

Compared to the freeform test he issued to Ketis, the test with the Leiner Grey narrowed down the problems into highly specific instances. The missing gaps in the design could only be filled in a limited amount of ways. The only materials and component licenses that Ves could draw upon were those included with the design files.

One of the issues that initially tripped him up was the fact that the Leiner Grey was a second-class mech design. It utilized a higher standard of materials and technology from third-class mechs which Ves had always worked with in his main designs.

To put it simply, Ves worked with pauper designs where cost was the major restraint. Exotics were used sparingly and many mechs he came into touch sold for prices ranging from three million bright credits to several hundred million bright credits at most.

The Leiner Grey, despite being a light skirmisher that didn't use up a lot of materials, already came with a floor cost of one billion credits!

If Ves tried to convince the Vandals to upgrade their landbound light skirmishers with an estimated cost of just 20 million bright credits to a Leiner Grey, they'd punch out his teeth before dumping him out of the airlock!

One billion bright credits was an extravagant price for a mech that only performed a couple of times better than a third-class equivalent!

"The cost is multiplied by a factor of at least a hundred, but the performance boost is only multiplied by five to eight times at most."

This was a horribly poor exchange rate, but a wealthy state like the Friday Coalition could afford to be extravagant. They possessed vastly more wealth relative to their manpower. Each of their mech pilots got to enjoy luxurious mechs compared to their pauper neighbors.

The result of all of this was that Ves needed to adjust to the higher standards. The amount of power and might at his fingertips tempted him to be liberal about their implementations. Ves realized that this was yet another trap.

"It's a temptation for me to swing all that power around. However, if I do so, my solutions become sloppy and I"II lose sight of my original standards."

Ves had never been wasteful about the resources at his disposal. Making the most out of a limited set of resources had always been a lesson that each mech designer from a third-rate state carved in their hearts. In the face of sudden wealth, the last thing they needed to do was to take it for granted and spend it all without a care in the galaxy.

He narrowed his focus yet again, preventing him from getting caught up in the rush of power. Once he got a grip on his mind, he resumed solving the problems of this test.

Days passed by in quiet contemplation interspersed with continual insights. Deconstructing, analyzing and providing solutions to the gaps within the design became a form of catharsis to him. He slowly forgot all of his responsibilities and become entranced at the challenge of solving the puzzles the Leiner Grey presented to him. Ves felt compelled to engage in them like a mouse going after a trail of cheese.

The puzzles he solved dealt with problems that seemed trivial but might prove fatal to the design if Ves offered the wrong solutions. Larger problems on the other hand granted him more leeway into solving them, yet he needed to do so in his own way rather than the way the Skull Architect preferred to do so.

As the Flagrant Swordmaiden fleet almost reached Mancroft Independent Harbor, Ves finally completed his design work after investing six entire days into filling up the gaps. The holes in its engines, power reactor, sensors, internal architecture, legs, arms, and many more had all been filled with parts that seamlessly merged into the existing design.

When Ves finally took a step back and evaluated the finished design, he rubbed his tired, bloodshot eyes and sighed. "Well that didn't go according to plan."

The Leiner Grey compelled him to invest increasingly more attention into solving it. Ves tried many times to restrain himself in order to remain at a healthy distance, but his obsession got the better of him a few times. Rarely did he get to touch, feel and work with such an advanced mech design that unabashedly exposed all of its secrets! "This design is like a succubus. It's constantly tempting me into abandoning my own principles."

The Skull Architect deserves his infamy. Even if he stopped chopping up mech pilots to advance his research, he still found a way to screw over others. Though whether the victims became worse off or not was still in question.

"The less talented mech designers with no hope of forging their own paths will benefit from following in the Skull Architect's footsteps."

Ves had no such intentions, however. He aimed for the top, and that required him to learn from others without becoming subsumed by their attraction. In order for students to surpass their teacher, they needed to step outside the rails their teachers meticulously constructed for them. Even if staying inside the rails was the path to least resistance, it always led into a solid wall at the end.

"What a profound design. I've learned so many lessons in these days."

Pure satisfaction ran through his tired body and exhausted mind. As he basked in the joy of completing this perilous but fulfilling challenge, he reflected on his results.

If Ves followed the original intentions of the Leiner Grey, then he would have pushed its limits in terms of energy transmission and other factors. This allowed it to achieve a greater level of performance at the cost of eating away at its tolerances.

Basically, it turned the Leiner Grey from a dull but stable mech platform into an exciting but inwardly brittle piece. The gains the original design had achieved in adding extra power and armor were partially negated by the awfully tight state of its internal architecture. It also made the mech a lot harder to control. The Leiner Grey gained a boost in performance that went past its stable limits. The mech basically strained against its own frame with every vigorous action it performed.

If Ves compared it to the exertions of a human athlete, then he could easily develop muscle sprain, culminating to severe injuries if he kept pushing his body past its limits.

A human body was flexible and had the ability to grow in order to cope with the added strain. A mech frame on the other hand was a static, mechanical construction that was essentially static. It wore down and broke when it faced continuous abuse.

"This is one of the weaknesses of the Leiner Grey. It's performance is high, but its life cycle is too short. It can already be written off after five years of intensive battles."

That made the Leiner Grey a mech with a poor benefit-to-cost ratio. Customers paid the equivalent of about one billion bright credits and lasted five years with the mech.

For the same amount of money, mech purchasers could instead buy a similarly priced mech that could easily last at least ten years or more. The only downside to these alternatives was that their performance was slightly inferior to the Leiner Grey.

Still, faced with this calculus, the most rational option to most customers was to buy a mech that lasted at least a decade.

"The only reason the Leiner Grey isn't an outright failure is because there is a market demand for high-performing mechs."

The mech markets of second-rate states was completely different from the lesser markets of the Bright Republic. People had more money to spend, and they didn't mind splurging lots of money for a momentary advantage.

Acquiring a new mech was like changing a set of clothes. A poor benefit-tocost ratio was no issue to these wealthy customers as long as the performance was high.

The only problem with the Leiner Grey was that the original configuration increased the difficulty of piloting such a machine. It was like manually driving an aircar that was perpetually moving at its top speed. The uncontrollable performance of the aircar could easily lead to a crash if handled improperly for just an instant.

The barrier to pilot the Leiner Grey was so high that only advanced pilots with excellent training and above-average neural aptitude were qualified to pilot this beast. Even then, nobody liked to pilot this berserk mech. The strain on their control abilities made piloting this high-powered mech a chore at beast, and torture at worst.

It simply wasn't pleasant to pilot this mech model, and that proved to be its ultimate downfall.

"No wonder the Skull Architect pursued the X-Factor. In order to accommodate the extremes he's willing to push his designs, he sought a way to compensate for this deficiency by trying to find a way for the mech to strain their mech pilots less."

The Leiner Grey design marked a point in time where Reno Jimenez was at the cusp of giving in to his darker urges. His designs all shared the same problems. They strained against their limits and were barely controllable by their mech pilots.

This problem must have gnawed at the Senior Mech Designer's mind for years. After being tortured by the same issue over and over without a solution in sight, was it any wonder that he grew desperate?

Either he could find some way to solve the control issue, or he could abandon the design philosophy he painstakingly built up over many decades.

The latter was too painful to contemplate, while the former involved chasing after a unicorn called the X-Factor.

"No wonder he went crazy."

Chapter 648 Philosophical Clash

Reno Jimenez developed a style of designing mechs where he attempted to extract the maximum level of performance at the cost of stability, control and longevity. This increased the parameters of his design's spec sheet, but customers weren't fooled. They knew his latest designs came with poor value for money. Many of his mechs broke down in five years or less.

"This is the attitude of a scientist and a pioneer. He pursues his own interests over that of the market and his customers. It's not that his designs are bad, but they are outright ignoring the trends of the market."

Different from the Senior, Ves had always adopted a market-based approach to his design work. Every time he designed a mech, he looked at the actual situation of the market and moved on from there. Essentially, he let his market research dictate the basic parameters of his next design.

He rested his finger on his chin. The contrast between their priorities formed an interesting comparison. "The Skull Architect already knows from the start what kind of mech he wants to design. As for me, the exact shape and form doesn't matter to me. All I want is to design a mech that sells well. Everything is a means to an end."

That didn't mean Ves cared nothing about his own advancements. His hoarding for knowledge and his experimentation with the X-Factor all proved that he possessed an inquisitive mind. It was just that an Apprentice Mech Designer operated under far less pressure than a Senior Mech Designer. One was a youth in the mech design profession. They weren't expected to come up with anything radical. The other represented an elder in the craft. The mech industry and mech market expected more from their results. Their designs had to push against the envelope.

If their newer designs didn't one-up their older designs by a fair margin, then they were considered stagnant!

"Mech designers that are stagnant don't have a bright future anymore. They've given up on blazing a trail and are instead content with ending their journey halfway."

Ves pegged Professor Velten as a person who had already given up on her life and the opportunity to advance. Instead of working at some prestigious institution, she instead took up an upscore posting with the Flagrant Vandals.

"It's different with Jimenez. His designs are burning with ambition. I don't think getting exiled to the frontier is going to stop him from his research."

Certainly, getting kicked off the membership rolls of the MTA and being exiled to the frontier hampered him a lot. After receiving the fear-inducing moniker of Skull Architect, the man probably wasn't in the best situation right now.

His story served as a strong warning to Ves of what could happen if he breached ethical lines.

"At least my own spin on the Leiner Grey won't let me to that point."

In contrast to the original design, the Leiner Grey completed by Ves went into a completely different direction. While Ves valued performance just like any other mech designer, he really didn't wish to sacrifice stability for a small boost in power and other attributes.

"A mech is the steed and armor of the mech pilot. Mech designers like us owe it to the mech pilots to fashion a war machine that can lead them through a battle without any sign of faltering. A mech that is so unstable that it will fall apart at the slightest misstep is a greater enemy to the mech pilot than his opponents on the battlefield."

This was his conviction. Certainly, prioritizing stability never led to exciting mechs on their own, but Ves had no doubt he could solve this problem in another way, such as resorting to the X-Factor or various technological gimmicks. If nothing else, Ves could always lower his price standards in order to provide better value for money to his customers.

He did recognize that his approach may not be a daring one, at least when it came to stability. Innovation demanded a daring approach to exploring the unknown. Taking risks came with the job.

"In that sense, I've disappointed the Skull Architect's expectations."

The Leiner Grey design came with an unspoken challenge. It challenged Ves to match its wild extremes, to push its performance to its limits, stability be damned. Doing so would mean that Ves agreed with the Skull Architect's standpoint.

That was unacceptable to him. Philosophically, he believed that mechs had to fit the mech pilots, not the other way around.

Some mech designers pursued their calling by pushing the limits of the technology and materials at hand to deliver a superior mech. To be fair, most of the innovation and advancement in the field of mech design came from their many contributions.

Yet a mech was inexplicably connected with their mech pilots. Mech designers had complete control over the design and construction of a mech, but possessed no influence at all on the mech pilots who actually used them. This lack of control over the latter led to a tendency for mech designers to

forget about mech pilots, treating them as an outside variable in the background.

A different school of mech designers adopted a very different perspective. Usually by necessity, they needed to design mechs that pilots were comfortable with piloting, otherwise they wouldn't be able to sell any mechs.

Faced with a choice between higher performance and more comfort, many mech pilots actually chose the latter.

"It's not that they enjoy missing out on that extra margin of power, speed or defense, but if the mech becomes too difficult to pilot, those hardware gains are entirely wasted."

A mech that performed ten percent better but became twice as hard to control for a specific mech pilot might eventually perform twenty percent worse. So the net performance change was actually a reduction of ten percent!

Naturally, this consideration varied wildly depending on which mech pilot got to pilot the mech. A skilled mech pilot possessed a much larger tolerance for difficult mechs, while average mech pilots with more modest genetic aptitudes could only settle for simpler mechs.

Some might scoff at lesser-skilled mech pilots and dismiss them as ants. Yet they also happened to comprise the majority active mech pilots, with a much greater number of untalented potentates in reserve. This was a huge market for mechs, one which Ves had guiltily ignored when he grew his mech business, but intended to fix that in the future.

"Designing elite mechs all the time will unnecessarily narrow my reach. There are only so many elites to market my mechs."

Ves didn't have much experience with designing a mass-market mech, but his duties as a head designer for the Flagrant Vandals taught him much. He

became intimately familiar with the traits of cheaper mechs, and knew what to look out for when designing these kinds of machines.

Out of the three internally-developed designs, the Hellcat and the Akkara mechs catered to the cadre of the Vandals. Powerful, expensive and difficult to master, they served as the mainstay of the Vandal mech roster.

In this sense, his Blackbeak and Crystal Lord designs shared the same DNA. Elite mechs only came up to their full potential when matched with an experienced, talented mech pilot.

"It should be different for a light skirmisher like the Leiner Grey or the Inheritor models."

Though one operated on land and the other in space, they served the same role. They served as the scouts, flankers and ambushers of a mech force. They worked best in battle when deployed in packs or in greater numbers, so they should ideally be accessible to mech pilots.

"If there's one thing I've learned from toiling over the Inheritor mechs, it's that there's only so much performance you can squeeze out of a skinny mech frame."

The lightweight class tended to be a poor platform for elite mechs. There simply wasn't enough room to stuff in enough goodies. Anything that mech designers wanted to add to the frame needed to be lighter and take up much less space than an equivalent component to a medium mech.

This instantly magnified the costs and reduced the benefits of those expensive additions.

So in short, it wasn't cost-effective to elevate a light mech to the performance standard of an elite. For better or worse, they felt most at home when they served as expendable mechs. "Expendable mechs are easy to lose, so the mech pilots that bring them into battle shouldn't be too valuable. Limiting the skill range of a light skirmisher model to elites is a tone-deaf response to the demands of the market."

That didn't mean a market didn't exist for premium light mechs. Many veterans and talented mech pilots grew up with light mechs and had come to favor this weight class over the others. These mech pilots needed light mechs that could keep up with their skills. In that sense, the difficult but promising Leiner Grey fit their needs.

This was where his take on the Leiner Grey came in. "If I have to describe my own work, I'd call it the Leiner Grey Simplified Edition."

Of course, he would never publish his design with this unflattering name, but it aptly described what he'd done to the puzzle presented by the Skull Architect. Though Ves was only limited to filling up the gaps in the design schematic, it provided him with enough leeway to steer it away from its original configuration as a powerful but barely controllable mech.

He pretty much did so by dialing back the energy being provided to the different parts and to program hard limits on the amount of power they exerted. Perhaps one or two changes in this vein wouldn't affect the design by a drastic amount, but when Ves performed the same tweaks over and over again, it all added up.

The changes he implemented throughout the design flattened the performance curve, smoothing out its peaks and valleys. This had the effect of tempering a wild, bucking horse into a calm and docile mount.

Unfortunately, this also resulted in a comprehensive loss in performance. The Leiner Grey turned from an exciting, high-performance mech into a boring but reliable workhorse.

It still maintained some of the strengths and of the original version, but became extremely accessible. Ves in fact slanted towards the other extreme when he put his own stamp on the mech.

"Comfort and pilot accommodation has always been a priority to me. A mech functions best when the mech pilot is at ease with his own machine."

A key factor that helped him turn the Leiner Grey into an accessible mech was that Ves borrowed the insights from his Masteries. Though the System only threw him into the cockpit of a knight mech and a rifleman mech, Ves easily applied the common lessons learned from those valuable first-hand experiences to the light skirmisher design.

From his detailed studies of the Leiner Grey design, Ves keenly realized that the Skull Architect lacked the special touch that came with acquiring a Mastery. As far as he was aware of, the Senior Mech Designer based all of his design work on second and third-hand experiences.

In some way, that was a huge shame, since the Skull Architect's designs would never mesh completely with his customers. On the other hand, his callous attitude towards the mech pilots that were supposed to depend on his products also led him to his current path of pursuing an extreme in performance through maximizing energy transmission.

"If the Skull Architect experienced at least a single Mastery, he would have felt a lot more empathy to mech pilots. He'd be a different man right now."

Ves stayed true to himself when he solved the puzzle in his own way. Now he had to submit his work to the man he sought to earn his approval.

"Will he be pleased to find out that I've taken the opposite approach?" Ves grew nervous all of a sudden. "I don't have any other choice. There's no way for me to hide my principles when I design a mech." Just as Ves learned a wealth of information about the Skull Architect from the Leiner Grey, so would the Senior be able to read through Ves.

Chapter 649 Observing Frailty

"Larkinson." The exotic purple-skinned and purple-haired visage of Mayra appeared on the projection. "I've received your submission. I've already passed it on to my mentor's account. It should take some time for him to go over his mail."

"I understand." Ves nodded. "Did you look at my take on the Leiner Grey?"

Mayra smiled ruefully at him. "I did, and I have to say you are very courageous for sticking up for your principles. I'm sorry that I couldn't warn you that my mentor doesn't have the best intentions in mind when he threw this test at you. Many mech designers who approached him have never been the same after undergoing this test..."

Ves waved away her concerns. "I'm not like the others. You can already see from my work that I haven't lost myself in temptation. I have always been aware that there are some risks involved with approaching a man with such a notorious moniker. I don't bear any grudge for his tricks."

If Ves was any weaker or less firm in his will, then he would have been pissed. Since he came out of this ordeal without any damage, he simply laughed the whole matter off. It was pointless to develop any animosity over a mech designer who wielded a vast amount of power in the Faris Star Region.

"I can't say how my mentor will respond to your design, but I think it speaks in your favor that you stood up for yourself. Too many mech designers who are new to the frontier think the only way to worm themselves into his circle is to act like sycophants. That's never the frontier way. Nothing disgusts my mentor more than a mech designer that bends too easily when it comes to their own work."

"I see. Is that how you gained his approval?"

"I didn't know anything back then when Lydia led me to my mentor." She shook her head. "So I stuck up for myself like always. I was rather stubborn back then, but that has served me well. He would have been disappointed in you if you copied his work without adding anything original. My mentor believes the only mech designers worth their salt are those pursue their own questions over any other obstacle in their way. "

That sounded swell until Ves realized that this was the same reason why the Skull Architect had been driven to the frontier. Reno Jimenez outright ignored the law and issued orders that led to the deaths of thousands of mech pilots and one irreplaceable expert pilot.

Sometimes, bending before a greater authority was a good idea.

"What was it like to study under him? Did he treat you well?"

"He was always more absorbed in his own research. I think he only took in students because he needed a firmer footing in the Faris Star Region." She replied. "That said, he treated us well enough, letting us read through his books and help him with the production of his mechs. He's the smartest mech designer I've ever met, and he seems to know every field related to mech design."

"How did he guide your development?"

"Well, I made it clear that I'm only interested in designing swordsman mechs, and he accepted that. He assigned an entire catalog of books as reading materials and reviewed the practice designs I came up with. He's not the sort of person who holds your hands. He expected me to work for my gains through my own hard work. Back then, I disappointed him a lot. I wasn't as diligent in my studies and wasted the opportunity to ask for his advice."

"Was it dangerous to be in proximity to him?"

"Oh, he's dangerous. Make no mistake about that." She immediately stated. "He's decent towards his friends but ruthless towards his enemies. I don't think he started off this way, but it's the only kind of language that the people in the frontier understand. In your case, you don't have to be too careful. My mentor doesn't see any threat in a young mech designer like you. From what I saw from your submission, it possesses enough quality to meet his minimum sensibilities."

"He sounds like a decent teacher."

"It comes with the job." The Swordmaiden mech designer smiled. "While he doesn't have the best reputation, he's very passionate about mech design. His conviction gives him strength. He misses his old life back in the Vermeer Group. He likes to collaborate and exchange information with his peers. Ever since he was driven out of civilized space, he doesn't have anyone who he can talk to on an equal level. Every other Senior Mech Designer in the frontier is a rival."

It sounded like the mech design industry in the frontier, if Ves could even call it that, was a lot more cutthroat than in civilized space. The market was smaller, infrastructure was poor but a lot of profit could still be made.

The natural tendency for mech designers would be to monopolize the markets from themselves. Without the MTA watching over their heads, they possessed plenty of incentives and none of the deterrents to resort to foul play.

"By the way, how is it going with Ketis? Has she been up to mischief yet?"

"Ehm, I'll have to get back to that." He nervously laughed. "I handed over a similar test to Ketis in order to get an impression of her design style."

"Well, I did promise you to get what you wanted from the Skull Architect." Mayra scratched her purple cheek. "But don't neglect her. Give her something to do. I would prefer it if you begin to educate her. Do you have a lesson plan in mind?"

"As you said, it depends on what I get in return. If I'm satisfied with what I've received, I don't mind guiding Ketis more intensely. I'll have to see her work before I can say what she needs to work on, but from what you said she needs to firm up her fundamentals and adopt the right mentality. The former can be done through cramming and tutoring, but the latter is something that can't easily be changed."

Having an excessively high opinion of yourself was one of the biggest mistakes a mech designer could ever make. Too many mech designers grew self-centered to the point of becoming a narcissist. Though Ketis may not have reached this point, Ves figured she was close to crossing the line.

"Don't be afraid to knock her on the head if she misbehaves." Mayra said, closing that particular topic.

The two discussed some routine business. Now that the Flagrant Vandals and Lydia's Swordmaidens moved together, they needed to coordinate their supply situation. One topic that Mayra emphasized was the fact that resupplying in the frontier was at least a hundred times more difficult.

"Most star systems in the Faris Star Region are wild and empty. Industry is almost nonexistent and trade in the supplies we need can only be done at the few pirate stations that manage to stay aloft."

The Faris Star Region was like a desert in that sense. Vast stretches of empty sand hid some buried treasures underneath the surface. The pirates and treasure hunters that made the frontier their home usually passed through the few oases in the sands. Sometimes, those stuck in the desert needed to travel for months before they could reach the nearest oasis.

After Ves hung up with Mayra, he turned his attention to other matters. He neglected his other duties during the time he worked on the Leiner Grey.

Fortunately, nothing serious happened that required his intervention. By now, the system of delegation did its work. If the lower-ranking mech designers needed any help, they reported to the higher-ranking mech designers. If they couldn't solve the problem, they kicked it up to the deputies. Only if the deputies failed to cope with the problem would Ves step in and save their bacon.

"It's a good thing that Mercator and Trozin have managed to solve the issues that cropped up. That leaves more time for me." He uttered with satisfaction.

Ves fired off a quick set of mails to his deputies and the other mech designers that performed well. There wasn't much substance to the message besides complimenting them for their diligence and reminding them to continue to follow the schedule.

He also noticed that a couple of mech designers requested one-hour tutoring sessions with him. He almost forgot about that, but he was glad people like Vedette recognized the benefit of receiving his instructions.

"I should clear some hours in my schedule to make time for their sessions."

Once he processed his backlog of paperwork, he turned his attention to Ketis. The girl had been quietly working on the assignment he gave out. It should be about time to evaluate her work.

"Alright Ketis, that's enough. You can stop your design work now."

"I haven't finished yet!" The horned lady squawked. "I just need a couple more days to complete my variant! This design you chose is awful to work with! I barely made any progress in the first day!" Ves shook his head. "I only need a snapshot of what you are already capable of. I can do that just as well with an incomplete design. Completing your variant isn't important."

He forcibly transferred the latest version of her variant into his terminal over her protestations. As her boss, he possessed full administrative privileges over her guest account, so he could do anything he wanted with it. Once he opened the design schematics of the rushed variant of the Caesar Augustus, he studied it with a critical eye.

"Sloppy." He said after a few seconds. "Your work is too rushed."

"That's because you only gave me a week's time! What am I supposed to do in a week? This stupid Caesar Augustus is one of the most complicated designs I've ever worked with! It's such a travesty that I feel like strangling whoever came up with this hybrid knight!"

Ves ignored her words and continued to dive into her work. Even though he hadn't been fair to her when he only gave her a week to deliver something presentable, the lack of care she showed went behind necessity. As Ves sampled her principles and the nucleus of her design philosophy, he sensed that this lack of diligence went deeper than he thought.

Every mech designer needed to be meticulous in their measurements and their judgement. Ketis seemed to pursue what she found the most exciting, which was the Caesar Augustus' sword and shield.

She focused most of her attention on strengthening her variant's melee capabilities, but completely neglected the wrist-mounted laser cannons and the shoulder-mounted missile launchers. The performance of those two weapon systems practically cratered to the bottom.

More than that, she also got some key measurements wrong, leading to several instances of bad fits between the various components. The errors slowly piled up until the variant underperformed by at least twenty percent, which was a very serious margin for this kind of mech!

In summary, Ves caught out two major flaws in Ketis' disposition. First, she only worked seriously when she came into touch with what she loved. Second, her foundational skills was filled with holes. She lacked systematic learning that every Novice Mech Designer should have memorized.

He briefly explained his observations to Ketis, who looked understandably displeased at being criticized in such fashion. "Excuuuuse me, you little boss! I didn't get the opportunity to grow up in a quiet, safe planet and go to school like everyone else."

"Look, I'm not trying to knock you down for that." Ves quickly said while holding up his arms in a harmless gesture. "I just wanted to get that out there so we can do something about it. Our first priority is to bring you up to the same level of your civilized peers. A good foundation is essential if you want to move up the ranks."

Ketis grumbled a bit but she wasn't an airhead. She knew was well as any other mech designer how far she fell behind. Whether she could sum up the motivation to close the gap was another matter.

The girl looked as if she was torturing herself when she attempted to design a variant of the Caesar Augustus. Her displeasure stood in stark contrast to Ves' enjoyment when he puzzled over the Skull Architect's test.

Ves believed the key to unlocking the guest designer's potential was to ignite her passion.

Chapter 650 Missing Drive

"Ketis, do you love to design mechs?"

"Uh, yeah. I do." She answered rather lamely as she flipped her hair over her shoulder. "I was always smarter than my fellow sisters. The Swordmaidens

rewarded me whenever I performed well on a test. Eventually, Lydia herself called me up to her office and told me that I was smart enough to become an engineer. She gave me the choice of studying to become a ship engineer or a mech designer. You can probably guess what I chose."

"If you chose to become a ship engineer, we wouldn't be talking to each other right now." Ves siad. "Tell me why you insisted on studying to become a mech designer. It's one of the hardest careers you can pursue. To make it this far, there must be a reason that is driving you forward."

Ketis looked reluctant to share her thoughts. However, she eventually relented after being stared at by Ves. Somehow, his unusually sharp gaze evoked a measure of fear from her instincts.

"We Swordmaidens fight with our mechs. We depend on them to guard our sisters from attack. We use their strength to force others into surrender in order to rob them of their stuff. Without mechs, we are nothing. I'm afraid of what will happen if Mayra isn't there anymore. She tried to raise some other sisters to inherit her work, but they never panned out. Right now, I'm the only one in the Swordmaidens who can back her up."

"So you entered the profession because you want to help your sisters?"

"That's exactly what I said! They need me to take on this job and be ready of Mayra ever croaks or goes missing. A lot can happen in the frontier. One day, nothing is happening. Another day, an entire war gathering of sandmen jumps on our ships. We've experienced so many accidents like this in the frontier that it's a miracle we managed to stay standing. I hope that with my help my sisters will continue to fight under our banner in the future."

Though her motivation sounded a little bland to Ves, he sensed the sincerity in her voice. She truly cared for the Swordmaidens and wished to do her part in helping them survive.

Yet this reason alone wasn't adequate to drive her to take her work seriously. In his eyes, it could only be a half-reason, something to say when you couldn't figure out a better excuse.

"It's admirable for you to care so much to your fellow sisters." He replied gently, but his tone grew firmer. "But if you continue to hold on to this reason alone, you'll eventually lose heart in the craft and remain stuck at the beginner phase."

"I'm not lazy! I work hard! Each and every day, I hit the books, I experiment with Mayra's designs, I doodle up my own designs! There's not a single day that goes by where I'm not doing something about mechs!"

Ves stood up from his desk and took measured steps. Each step forward added to his momentum and increased his stature in front of Ketis.

Though the girl made herself out to be strong and tough, in the end her life experience was too brief. Against his intimidating approach, she instinctively shied backwards.

"W-W-What are you doing?!"

Ves halted within one step of Ketis. Even though she could have unsheathed her giant sword and use that to threaten Ves, somehow the thought never crossed her mind. This was not a contest of arms. It was a contest of wills.

And she lost badly.

"Let me ask you again." Ves spoke and jabbed his finger against her collar. "Are you passionate about mech design?"

A few seconds passed as Ketis looked both angry and defeated. ".. I guess not as much as people expect of me. It's just.. it's hard work, and boring work at that. Just because I studied better in my youth doesn't mean I'm cut out to be a geek. Just look at me!" She brandished her biceps and her muscular figure.

"I'm a warrior! I'm a Swordmaiden!"

Ves audibly sighed in front of him. His breath brushed against her angry face.

"You are a Swordmaiden, but you are neither a warrior or a mech designer."

"What did you say?" She whispered.

"I get it that you're interested in your martial training. But you are taking it way too far. How good are you compared to your sisters?"

"Pretty good, actually. I'm not as good as the best in my age group, but I'm well above average. I train my body every day and I spar with my sisters whenever I can."

"Okay, let's say that Mayra drops dead one day. It's a big tragedy. Now what?"

The silence stretched on. Ketis realized that she had put herself in a bad spot. It didn't help that Ves loomed inside her personal space and put continual pressure on her psyche.

In fact, Ves was resorting to a trick he recently picked up. He was blasting his Spirituality in the direction of Ketis. Though he didn't expect his trick to be very effective due to a lack of understanding in this area, he figured it could at least add to his stature.

"Well?" He prodded her again. "Answer me! You talked about this exact same scenario a few minutes earlier! Shouldn't you be prepared for this eventuality? What will you do when Mayra won't be available anymore?"

Ketis adopted a defeated expression. "I can't be in charge of all of the mechs in the Swordmaidens. It's too much to me. I can't even design a successful variant of a single frigging hybrid knight. What business do I have with Mayra's precious machines? I won't be able to give them the care they need." "It's good you recognize your shortcomings." Ves said, stepping backwards and relenting on the pressure he put on the girl. "You are not young anymore. The time for playing and frolicking with your fellow sisters is over. As an adult, you need to take your responsibilities seriously. Does spending half of your day on warrior training sound wise to you?"

Of course it didn't, yet Ketis stubbornly held on to the beliefs she acquired since she was young. It wouldn't be so easy to shake off her compulsion for warrior training. Still, as long as Ves pried open a gap in her armor, time would eventually do the rest.

"You're a jerk, you know that?" She gritted her teeth at him as she couldn't think of an appropriate response.

Ves patted her shoulder in a gentle fashion. "Let's take a step back for now. Let me tell you about an observation I have made. I've encountered many mech designers. Some are Masters, others are Novices like you. They vary from their twenties to their five-hundreds. Some designed hundreds of mechs, other haven't even completed a single original design."

"What are you getting at, mister?"

"What I'm trying to convey is that I've encountered so many mech designers that I can tell what separates the good ones from the bad ones. And you know what strikes me as the one major element that every good mech designer possesses? Passion. Love. Ambition. Desire."

"I count four words, not one."

"Doesn't matter." Ves shook his head. "They all convey similar meanings. The point is that the mech designers who have all achieved some success are driven individuals. They don't look at the present and find themselves content with their lot. They are always casting their gaze into the distance. They hope to reach a greater height in the future, but they know they won't get there by

inertia alone. They have to work for it. Fight for it. Struggle for it! Good things don't come by themselves!"

Ketis was taken aback by his fervor.

A fire lit in his eyes as he waved his arm as if he conjured up a magnificent vision. "Don't you have dreams? Your vision has always been limited to the Swordmaidens. That shouldn't be endpoint of your ambition. Aim higher! Don't you wish your designs be piloted by more than a few hundred Swordmaidens? What about thousands? Millions? Billions? As long as you work hard for it, your designs may proliferate throughout the Faris Star Region one day! You'd be as famous as the Skull Architect! Think about it! Is that a dream come true to you?"

"I.. I don't know.." A hunger definitely burned in her mind as she got caught up with the fantasy Ves spouted, but it didn't quite fit with her heart. "I never thought about how my work will affect others besides the Swordmaidens. This.. this is too big for me. I'm sorry, I never held such dreams before."

"It's not too late to start." Ves spoke and patted her shoulder yet again. "Look, it's fine to stay attached to the Swordmaidens. It's just that you are wasting your talents and limiting how much you can help them if you keep on spending your time like always. Develop a goal. A real goal, one that doesn't involve the Swordmaidens. You don't have to separate from your sisters. In fact, it's best if the goal is complementary to the interests of your sorority. The key is that a mech designer can only truly better themselves if they design mechs for a wider audience."

She blinked at him. "Won't I be leaving the Swordmaidens behind?"

"Not at all. The stronger you become, the more you can help the Swordmaidens get even stronger. Every good mech designer is a moneymaking machine, you know. Tell me, does Mayra have any side businesses?" "Ah, she designs mechs for some of the smaller pirate gangs that we've acquainted with." She said as she stroked the floating scabbard that held her greatsword as if it was a purring cat. "Many of them don't have their own Journeyman Mech Designer, so Mayra's help is very welcome to them. They exchange favors or valuable goods in favor of her expertise."

"You see? Mayra is capitalizing on her advantages. Everything she gains in exchange is helping the Swordmaidens in obtaining new goods and securing new allies. What do you think will happen if Mayra advances to become a Senior like her former mentor?"

Ketis widened her eyes. "She would become one of the hottest names in the Faris Star Region! She could lift us all up into a big influence! No one would dare to touch us then! Our enemies will be too scared of how many allies we can draw upon!"

Ves let the Novice indulge in the fantasy of before making it all come crashing down. "So let me repeat an earlier scenario, one that you brought up yourself I might add. What do you think will happen if the opposite occurs? Sometime in the immediate future, Mayra turns up dead or missing. The only mech designer who can fill her shoes is you. What will happen to the Swordmaiden's strength and their relationships?"

"Not good! Not good at all!" Ketis finally became aware of the gravity of the situation. "Those so-called allies of ours are all scumbags. If Mayra is no longer with us, I'm not sure they're willing to back us up anymore. The only reason they're giving us the time of day is because we have a Journeyman at our disposal. This.. this is a disaster!"

"Mayra has helped build the Swordmaidens up, but she can easily tear you down as well. Your outfit is too dependent on a single talented mech designer. So long as this concentration of ability persists, your group will never be secure. The only way out of this precarious hole you've dug for yourselves is if you step up and treat your profession seriously. Let me ask you this, what is the meaning of a mech designer?"

"Uhhhmm.." Ketis had to scratch her head again. "To design mechs?"

"Correct. A mech designer designs mechs just as mech pilots pilot mechs. It sounds obvious, but look at it from another perspective. Does a mech designer need to be able to fight? Does a mech designer need to learn how to fight with a sword? Does a mech designer even need a strong body?"

The answer to all of those questions was no. Ves had been driving towards this conclusion all this time, but Ketis appeared to be unwilling to admit the truth.

Ves landed the killer blow. He stepped closer and placed both of his arms on her muscular shoulders. "Disregard your own ego for a moment and ask yourself this. Will the Swordmaidens benefit more from having an extra warrior or an extra Journeyman Mech Designer?"

"But.." She stammered. "I'm not as talented as Mayra. I'll never be able to advance to Journeyman?"

"Will you? Nothing is impossible. Mayra managed to do it. You're her student, her protege. As long as you are motivated and possess the right work ethic, there's no reason you can't follow in her footsteps. Don't underestimate your own potential. A daughter of the frontier can be just as talented in designing mechs. It starts with a dream."