Mech Touch 6501

Chapter 6501 Part-Time Piloting

The Bluejay Fleet finally returned to New Constantinople.

Just as expected, no incidents had occurred despite the fact that the journey took a little longer due to taking a detour.

Ves looked forward to returning to Diandi Base and reuniting with his family in person.

After that, he wanted to put all of the 'exciting' events behind him and return to his greatest passion, which was designing mechs.

As the Bluejay Fleet settled into orbit of New Constantinople VIII, Ves headed down to one of the hangar bays to see off an ace pilot.

"Now that you have safely made the journey back to this star system, I am no longer needed to keep you safe." Saint Tusa declared to Ves as he wore his custom piloting suit and looked ready to depart. "The Bluejay Fleet and the armed forces of the Devos Ancient Clan should be strong enough to fend off most possible attackers. I have already heard that the Red Three is in the process of upgrading the local defenses as well, so your position should be quite secure. Having me around won't really change that much, so I prefer to make myself useful elsewhere. The frontlines of the Upper Zones are still under pressure and could sorely use my help. The sooner I leave, the better!"

Ves sighed. He would have preferred to keep Saint Tusa around despite the friction that had emerged between them. He had too few reliable protectors by his side.

However, Ves could not dismiss Tusa's argument either. In the interest of safeguarding human civilization, it was better if Tusa returned to acting as a troubleshooter at the frontlines. A highly mobile and difficult to catch ace light skirmisher could provide relief in many future battles.

"AGREED." The ace mech voiced his own opinion. "THIS STAR SYSTEM IS BORING. NONE OF THE ALIENS ARE STUPID ENOUGH TO MOUNT AN ATTACK ON IT, MY PARTNER AND I WILL JUST GROW BORED EVEN AS OUR COMPATRIOTS ARE DYING AND FIGHTING FAR AWAY. OUR CALLING LIES IN THE BORDER REGIONS. WE SHALL NOT REST SO LONG AS THERE ARE STILL ALIENS WHO ARE TRYING TO INVADE HUMAN SPACE." Since there was no way to stop Tusa and the Dark Zephyr from doing what they wanted, Ves simply shrugged and accepted this decision.

"I won't lie and say I am happy to let the two of you go. I can understand that you are still needed at the frontlines, though. It is actually a failure on the part of the Larkinson Clan that we have yet to form a proper first-class fleet that can support you and fight alongside you. We will be able to form it eventually, but that requires more time. For now, the best way for you to fight is to rotate as a freelancer as you have been doing before."

Tusa nodded and placed his hand on the battlefield. "I am glad you understand. Just as

you are serious about fulfilling the responsibilities of a mech designer, I am also serious about my own job. As a mech pilot and a particularly strong one, my place lies on the battlefield. I cannot ignore the drastic consequences of letting the most besieged star systems fall to the native aliens, thereby putting another region at risk of getting overrun by the native aliens."

"You have a good heart." Ves complemented. "If you go, make sure your ace mech doesn't take any heavy blows. It is really troublesome to repair an archemech away from any knowledgeable technicians or engineers. The maintenance crew accompanying you and the Dark Zephyr are still incapable of performing many repairs."

"Don't worry. I will make sure I won't get hit." Tusa confidently said.

After a bit more chatting, the ace pilot decisively entered the cockpit of his machine and departed from the hangar bay.

Ves meanwhile returned to the design lab and addressed the Senior Mech Designers who were left.

"Jovy, Vector, I will be in touch with you as soon as I have come up with a good idea for our next Carmine mech design project. Romanda, you are with me. Since you have decided to work for me, I will help you get settled inside Diandi Base."

The status of Romanda remained a bit awkward for the moment. She remained a branch member of the Devos Ancient Clan, but also served as the secret liaison of the Horizon Cell of the Cosmopolitan Movement.

That latter part was ordinary grounds to have her arrested for treason before letting her get executed, but Ves saw no profit in that course of action.

As much as Ves despised the cosmopolitans regardless of which galaxy they happened to reside in, he was not above using them to his own advantage.

In the Milky Way, his mother and her fellow conspirators were probably trying to contact the cosmopolitans over there in order to form an unholy alliance.

In the Red Ocean, Ves wanted to obtain a precious information channel that could give him a much better understanding of what the crazy cosmopolitans were up to. He did not want to get caught off-guard like he was in the past.

He at least accepted the notion that the Cosmopolitan Movement had grown far too old to maintain a single united front. Many of its cells had spent so much time apart from each other that they had diverged into entirely different organizations.

Depending on their leadership and the challenges they faced, the cells had radicalized to different degrees. Their experiences had also shaped their culture and moral bottom lines in many unique ways.

From what little Ves managed to discern from Lady Romanda Devos, the Horizon Cell most definitely sounded like the more reasonable ones.

Of course, that did not cause Ves to let his guard down entirely. Moderate or not, any

part of the Cosmopolitan Movement still possessed the fundamental delusions and willingness to act on them! No cosmopolitan was entirely safe!

The reason why Ves tolerated Lady Romanda to the point of inviting her to work and live in Diandi Base was because he perceived very little individual threat from her. There was little she could do to him in the absence of an army at her disposal.

Despite the enormous danger she put herself into, the woman still believed in her mission.

She was a cosmopolitan who could actually recognize that recklessly continuing to support the native aliens by transferring intelligence and technological secrets to them would ultimately result in total human extinction.

So long as helping Ves would maintain a certain degree of equilibrium between red humanity and the native aliens, Romanda should remain a valuable ally and intelligence

asset.

However, once the balance of the Red War shifts in the favor of red humanity, her reliability should drop. The more red humanity was able to gain the upper hand, the more Romanda turned into a liability.

Ves accepted this condition. He was confident he could keep Romanda under control. At worst, he could always arrange an 'accident' for her. That would be best, as exposing her for a traitor would cause her to spill inconvenient information.

Such a solution was still too far away. Red humanity was doing anything but good at the moment. Ves should start worrying about the damage that Romanda could do once the

war had finally taken a turn.

"Let's go."

"Right." The older woman said.

After a small delay, Ves and his entourage soon teleported back to the surface of New

Constantinople VIII,

"Papa! You're back!"

"I missed you so much, papa!"

"Oh, calm down! I am not going anywhere."

Ves grinned as he reunited with his wife and children. He had been absent for too many weeks, so that made this reunion especially heartfelt.

He made sure to reserve the rest of the day to spending time with his children. Aurelia, Andraste and Marvaine all remained as cute and lovely as ever. That wouldn't last, so that made these days all the more precious.

His wife also greeted his return with a smile, but her eyes clearly conveyed she had a bone or two to pick with her husband.

She was willing to keep her opinions to herself, though. She did not want to spoil the

reunion for the children.

Once Ves played and chatted with the kids up until late evening, he and his wife gently

put them all to bed.

As Ves finally tucked Aurelia to bed where she lay next to a watchful Clixie, he leaned in

and kissed her on the forehead.

"Papa?"

"Yes, my golden girl?"

"Can I pilot a mech?"

Both Ves and Gloriana blinked.

"What brought this question on, my dear?" The mother said with a touch of concern. "You never expressed a strong interest in mech piloting before."

"That was because piloting mechs was reserved for norms, mama. I have almost no chance of developing a good genetic aptitude." Aurelia said as she started to cuddle with the Rubarthan Sentinel Cat. "Now that papa released his Carmine mechs, anyone can become a mech pilot. I think that going forward, everyone who can afford to will become a Carmine mech pilot. It will be as common as firearms possession. Statesmen, bureaucrats, law enforcement and so on will all become part-time Carmine mech pilots just because they want to possess the power to protect themselves if necessary. They don't want to delegate all of their security to others. If necessary, I want to fight as well."

Ves understood what his daughter wanted.

"Oh, Aurelia..." Gloriana said as she stroked her hand on her daughter's head.

It did not take much thinking for Ves to make up his mind. "I see. You have made a wise choice. I cannot bear to refuse your request. I am fine with letting you become a 'part-time Carmine mech pilot' as you have described it. You don't want to become a soldier, but you want to be able to fight if enemies show up at your doorstep. That is unfortunately a risk that you have to bear simply because you are my daughter. I have made many enemies, and some who think they are clever will try to kidnap or kill you just to get back at me. If a situation like that ever happens, I would be much more reassured if you possess self-defensive capabilities." Aurelia looked up with a sleepy smile. "So can I?"

"Yes. I will think about how to do this correctly. I can't enroll you into a mech academy and become a full-time mech cadet. You will have to take part-time classes outside of your regular schooling in order to steadily gain the proficiency needed to pilot a powerful Carmine mech pilot. Be prepared for a hefty study load as I don't want you to pilot a machine as simple as a third-class knight mech. A daughter of mine should definitely be able to pilot an advanced first-class Carmine mech, preferably a rifleman

mech."

"What about a first-class multipurpose mech?" Aurelia asked.

"Absolutely not!" Gloriana rejected this proposal. "If you insist on this course of action,

then you need to know your limits. There is only so much you can learn in your limited free time. Earning the qualifications to pilot a first-class multipurpose mech is extremely arduous, even for the more talented and intelligent first-raters. It is better to master a more limited set of skills well than try to spread yourself too thin. I agree with your father. Specializing in piloting a first-class rifleman mech is the best choice. You solely need to improve your marksmanship as far as weapon skills are concerned. You do not have to fight by getting close to your enemies, and your mech should be fast and nimble enough to stay clear of incoming threats. Becoming a good marksman while piloting a Carmine mech should also allow you to become good at handling firearms outside of the

cockpit."

Ves had never thought of letting his children become part-time Carmine mech pilots, but now that he was thinking about it, he recognized that there was a lot of potential in this proposal.

Chapter 6502 Greedy Carmine Mech Proposal

After Ves and Gloriana put their children to bed, they retired to their own bedroom and got ready for a short rest.

"Meow-" Lucky yawned as he rested on one of the pillows.

While Ves had changed into his pajamas, his mind was not on sleep, but on what mechs he should design next.

Carmine mechs were in extremely high demand right now. Ves knew that there was little use in designing other mass production models at the moment because the demand for them was not as high.

The market clamored for more Carmine mechs. Even his fellow Larkinsons wanted to get their hands on Carmine mechs that were qualitatively superior to the Yellow Jacket

models.

There was nothing wrong with the Yellow Jackets, but everyone could immediately tell that they were clearly budget models designed for the lower end of the market.

The Larkinsons had grown spoiled ever since Ves first showered them with one premium mech model after another.

The clan had never been particularly short of money. The success it had attained in the mech industry and over its various expeditions had enriched the clan's coffers and allowed it to take better care of its mech forces than many other private organizations. This was why the Larkinsons had the luxury to look down on the Yellow Jacket models. Few if any of them wanted to shackle their futures to what may possibly be the cheapest and weakest Carmine mechs in existence.

This was why Ves urgently needed to design a more powerful and advanced Carmine mech that catered to the upper end of the market.

However, that was not the only priority on his mind.

Aurelia's request caused Ves to turn his attention to another potential market.

Now that mech piloting had become available to 96,5 percent of the population, a huge amount of norms wanted to get into mech piloting, possibly from scratch.

They all required at least 5 years of training to achieve minimal combat effectiveness with a simple Yellow Jacket mech, but that was far too little to match the skill level of a typical professional mech pilot.

Perhaps the practice of auxiliary qi cultivation methods might allow the inexperienced Carmine mech pilots to accelerate their learning ability and master their skills considerably faster than before. Ves was not sure how effective this could be, but he did not think the effects would be too exaggerated.

It was safer to let a young Carmine mech cadet undergo 8 to 10 years of schooling as was standard. Teenagers tended to undergo a rapid growth period during their academy

years. They were highly responsive to focused training and improved extremely rapidly if the conditions were right.

What Ves wanted to do was to cater to these future talents and heroes by designing a highly versatile Carmine starter mech that could grow alongside their young bonded partners and mature into a powerful combat mech after applying continuous adaptive upgrades!

This was not a simple mech to realize.

"It's like designing a training mech that is designed to be easily transformed into a fully capable combat mech, one that must also be modular and highly adaptable to other mech archetypes!"

It was already difficult to design a good training mech or modular mech platform in isolation.

Trying to fit both roles in a single comprehensive modular mech design exceeded the limit of what normal mech designers could accomplish!

Sure, if they tried hard enough, they could probably cobble up a shabby solution together, but it would absolutely underperform as both a training mech for mech cadets and a combat mech for professional soldiers!

What Ves aimed to realize was a Carmine mech that could remain somewhat competitive with the prevailing training mechs on the market at the start, but also transition into a decent modular mech platform after undergoing a really easy overhaul!

"This is crazy... yet can it be done?"

Ves grew more and more excited at the prospect of undertaking such a challenge. It would test his skills and force him to develop all kinds of creative new solutions. The technical demands of this project would exceed every other mech he had designed in the past!

Much could go wrong if he attempted to design such a mech. The sheer amount of moving and adjustable parts needed to design such a monstrosity exceeded the normal limits.

This was dangerous because more parts translated into more failure points. There was always a risk of components breaking down or malfunctioning due to one reason or another. It became a lot more difficult for maintenance crews to inspect the conditions of every individual component and replace them before they broke during the worst possible time.

Ves had never been particularly gifted in this fine and intricate technical design work. He knew his own strengths and weaknesses. His approach towards mech design had often been described as sloppy. He was willing to tolerate small errors and shortcomings so long as the holistic package aligned with his vision. That was an approach that worked particularly well for simple mech designs with high tolerance for errors such as the brand-new Yellow Jackets or the highly robust.

Ultimatums.

However, this training and combat Carmine mech concept would be anything but simple. Ves was not making his job easy by trying to do too much with a single mech

frame.

Was he up to the task? He was not too sure, but he was willing to give it a try.

The choice of collaborators was crucial. He needed to cooperate with mech designers that could help make up for his shortcomings but also believed in his vision.

He soon turned to his wife, who was sitting in front of her vanity doing... woman stuff.

"Gloriana."

"What is it, Ves? Did you come up with a new mech concept?"

"I did. Our first daughter has given me quite a bit of inspiration. Let me explain what is on my mind at the moment."

Ves quickly summarized his train of thought to his wife, skipping a lot of explanations because he knew she was knowledgeable enough to fill in the gaps herself.

After he conveyed his idea, his wife furrowed her brows while putting down her

hairbrush.

"That is... an ambitious idea. Normally, I would never allow you to design such a greedy Carmine mech. You are trying to fuse two kinds of mechs that diverge far too much from each other. Training

mechs are designed with safety, longevity and economy in mind. They need to be easy to pilot from the beginning, which clearly reduces many advanced operations that can only be implemented in more high-end machines. However, by demanding that the owners of this training mech be able to convert it into a fully capable combat mech, you need to develop a conversion plan that retains as many parts of the former as possible, but also offer far superior performance from those very same starter components!"

His wife clearly understood the heavy challenges that Ves needed to tackle if he tried to design such an ambitious Carmine mech.

That last description was the most crucial challenge that Ves needed to overcome in order to turn this project into a success.

What Gloriana said was correct.

To put it in a different way, Ves needed to design a training Carmine mech that was not

only safe and harmless to pilot for Carmine mech cadets in their teens, but also perform like a powerful premium Carmine mech when their bonded pilots had grown up and graduated from the mech academies!

It may just be possible to realize such a complicated mech if Ves stuck to a single mech type such as a rifleman mech, but that did not satisfy all of his demands.

Ves wanted to take this a step further and design a Bright Warrior Mark III-like modular mech platform that could easily be transformed into any common mech archetype! "I know it is difficult, honey, but it can meet the demands of so many people that I don't need to design any other Carmine mechs for a time." Ves explained his reasoning. "I know it is taboo to attempt to meet the demands of far too many people at once, but I am not. necessarily looking for excellence. What I want is to design a 'good enough' training Carmine mech and a 'good enough' modular Carmine mech platform. As long as it can perform adequately well in all fronts, my goal has succeeded. Third-party mech designers are free to license the design and develop their own specialized variants that perform significantly better at their narrowly defined roles."

His wife still disapproved of his ambition. "You are letting your past successes inflate your confidence. Just because you have been able to break the genetic aptitude tyranny does not necessarily mean you are skilled and experienced enough to solve this technical puzzle. You need to rely on a completely different set of knowledge than what you are usually good at to design such a solution. If you were a Star Designer or a renowned Master, then I would have wished you good

luck, but you are still short of reaching that standard. This mech proposal of yours is the product of your own hubris. I know you want to save time and design one mech that can fulfill the roles of two different machines, but there are good reasons why very mech designers have tackled

this challenge."

She raised a couple of good points. Not even older and more seasoned mech designers dared to tackle such a complicated project. It was far too easy to produce a mediocre mech design that barely made any ripples in the mech market. It was too much of a risk to commit to this sort of project.

The mech market strictly divided training mechs and combat mechs for good reasons. One should never be used to fulfill the functions of the other, or else a lot of accidents

could occur!

"I have only heard rejections from you. Do you have any more constructive feedback for me, or is telling me my mech proposal sucks all you can share, Gloriana? You know I cannot design a training Carmine mech or an advanced combat Carmine mech in isolation. Aside from disabled veteran mech pilots, every Carmine mech pilot starts out as a completely blank slate. He has to practice with a genuine training mech for at least a few years before he can graduate to piloting a real combat mech. Unlike potentates, a norm cannot switch from one machine to the other. He is stuck with the first Carmine mech that he is bonded. That is why I cannot easily simplify this mech concept." Ves was being limited by the greatest weakness of the Carmine System.

If Miss Alexa Streon had already begun to make attainments in the development of her revolutionary living legacy mechs, then he could push aside such a convoluted solution. A Carmine mech pilot should be able to pilot a training Carmine mech during his

academy days before transferring to a combat Carmine mech belonging to the same mech dynasty!

However, Alexa was still at the early stages of fleshing out her design philosophy. There was still a lot more room for growth and optimization. Ves did not dare to incorporate her experimental work too soon on a project as important as the second commercially available Carmine mech of the Red Ocean!

While Ves lamented that his direct disciple had not yet been able to come out with her first proper living legacy mechs, his wife offered an alternative solution. "Hmph! You accuse me of overlooking the need to provide constructive feedback, but that is because you are too short-sighted to recognize

the obvious response to my criticism. As far as I am concerned, you must rein in your greed by simplifying what is not essential. In my opinion, the demand for high modularity must go. Why must you design a training and combat Carmine mech that can fight as a swordsman mech, a knight mech or a rifleman mech depending on the configuration? It is much more realistic if you limit yourself to designing a rifleman Carmine mech that can fulfill the roles of both a training mech and a combat mech. This way, you can perfectly meet

Aurelia's demand for a suitable machine to enable her part-time Carmine mech pilot

career!"

"That... actually doesn't sound so bad."

Chapter 6503 Simplified Objectives

Ves paused for a time. He mulled over Gloriana's response and found that she had raised a good point.

He was already stretching his capabilities by setting a goal of designing a training mech and combat mech in a single package.

Since he had made such a difficult demand right at the start, the last thing he should do was to add another major complication.

High modularity was a demand that always added a huge amount of complexity to a mech design. The overall performance of the entire package dropped the more a mech designer wanted to branch out and add new possibilities.

Trying to tack on this burden to a Carmine mech design that was already troublesome to design was indeed pure hubris as Gloriana described.

The proposal she made therefore sounded quite reasonable. Ves did not like it that her suggestion massively reduced the scope and usability of the resulting end product, but his wife presented additional arguments to back up her position.

"Ves." She said as she turned around and pinned him with a judgmental stare. "You are trying to do too much at once. Carmine mechs are new, so no one is demanding you to cater to everyone's needs right at the start. Learn how to walk before you learn how to run. It is much more sensible for you to incrementally expand the lineup of Carmine mechs with basic and familiar options over time.

Cover the basic mech archetypes first. according to the needs of the customers as well as our society. Considering that there are many people who aspire to become 'part-time Carmine mech pilots' such as Aurelia, it is best to satisfy their needs first. For these civilians who are not expected to devote all of their time to polishing and perfecting their piloting skills, you need to give them a machine that they can easily learn and master."

The two started to form the same brain wave. Now that Gloriana espoused her own thinking on the subject, Ves easily picked up the arguments that she had not yet voiced. "Of course!" He almost jumped to his feet! "You are right that I shouldn't aim so high at the start. Right now, a lot of civilians want to pilot a Carmine mech, but are unwilling to commit the life of a full-time soldier. It may be better to train them as reserves that can form a planetary militia if the planet they are on is under attack by the native aliens. Given the needs of the Red War, we don't need to provide an abundant supply of Carmine mechs that cover every mech archetype such as light skirmishers or heavy artillery mechs. It is best to keep it simple. Rifleman mechs are an ideal choice for a Carmine mech meant for reserve duty."

"It is the sort of Carmine mech that I would want my firstborn daughter to pilot." Gloriana nodded in agreement. "Piloting melee mechs is more demanding to civilians who lack the mindset of a warrior. I am not concerned about letting Andraste pilot a swordsman mech because she is skilled with swords and possesses a fighter's mindset.

Aurelia is lacking in this aspect despite being older. Even if we arrange her to practice her swordsmanship, being able to execute sword techniques in a training ground is one thing, trying to utilize them in combat against other mechs or deadly alien opponents is another thing! It is far too easy for inadequately trained and insufficiently tempered mech pilots to make mistakes or lose their courage far too easily. They will break too soon and cause a rout that can quickly go out of control."

As a mech designer who had fought enemies up close in a number of battles, Ves understood quite well how fearsome it was to confront opponents at point-blank range.

While it was important to possess good fighting skills, mentality also played an outsized

role.

The braver the mech pilot, the greater the probability of overpowering an adversary and winning the bout.

Mech pilots needed to suppress their instinctive fear of putting themselves in a lot of harm by putting their machines in front of dangerous enemies.

They needed to keep enough of their cool to maintain a bit of situational awareness and prevent themselves from getting ambushed from another direction.

If necessary, melee mech pilots might be asked to charge straight at a formidable enemy warship that was bristling with gun turrets that could swat them down in a flood of unrelenting firepower!

Not just anyone could fulfill these risky missions. This was not an age where peasants could be conscripted into shabby armies and be sent to the frontlines so that they could die in droves.

In contrast, ranged mech pilots had it much easier. Even though they also had to bear risks whenever they entered the battlefield, they usually weren't the priority targets. Rifleman mech units usually maintained a healthy distance from the enemy. It was much easier for them to maintain their situational awareness, and their ranged armaments also allowed them to make moderately effective contributions without letting them get too close to the enemy.

By maintaining their distance from the enemy at all times, it was also much easier for rifleman mechs to disengage from the battlefield and retreat in good order. This should be an incredibly attractive condition to many part-time mech pilots who lacked the courage to persist in the battlefield.

Ves rubbed his hairless chin in thought. "As far as most people are concerned, it is considerably easier to train their marksmanship as opposed to swordsmanship. Many civilians already undergo basic training in the operation of firearms as they are useful for self-defense purposes. It will be difficult for them to master more advanced operations such as firing while performing dynamic maneuvers or landing consistent hits at longer ranges, but it is not necessary to master these skills in order to turn these part-time Carmine mech pilots combat effective. If we truly need to rely on a large amount of conscripts to help win our battles, it is not possible for them to perform advanced or

dangerous maneuvers."

The more he thought about it, the more he felt that the decision to design a premium Carmine mech that focused solely on mid-range ranged combat was the best choice he could make at this junction in time.

Even though the limitation of sticking to a rifleman mech archetype denied a lot of potential customers the satisfaction of piloting the machines of their choice, Ves could not satisfy everyone all at once.

It was better to do one job well than many jobs poorly.

As Ves began to visualize how such a Carmine mech would look like, he roughly imagined a rifleman mech made of premium materials and enough adaptability to accommodate a moderate range of Carmine mech pilots.

Once a Carmine mech cadet had graduated from the mech academy or a qualified training program, he should be able to convert his 'training mech' into one of several standard configurations of rifleman mechs, and many more unofficial conversion options created by third-party mech designers!

"By forgoing melee options first, you can be assured that you can design a good rifleman Carmine mech" Gloriana commented. "It is a luxury to service every comprehensive need during the early stages of your Carmine revolution. Focusing on rifleman mechs will most likely satisfy the immediate demands of at least half of your potential customer base. It is not that the other mech archetypes are unimportant, but their priority is not as high, so you can take care of them later. In fact, it is better to delegate the design of a Carmine space knight and a Carmine light skirmisher to other design teams or even other mech companies. You only need to provide the base templates, which should at least come in the form of a basic ranged option and a basic melee option."

"I see. You make another good point. I do feel bothered with the lack of time. I still want to design conventional mechs as well. There are many ideas that are simply not suited to be turned into Carmine mechs. I should develop a couple of good templates that other mech designers can adopt and alter to suit their own specializations."

He understood where Gloriana was going. It was impossible for Ves to devote so much time and attention to designing the Carmine version of a spearman mech or whatever. As long as he and his design team already released a swordsman Carmine mech or whatever, a third-party mech designer could easily design a variant that was optimized for wielding spears or axes.

What mattered now was that Ves set the standards by developing those two initial

Carmine mech designs.

His wife made another remark.

"By the way, Ves, the terminology you have used is inconsistent. You mention 'rifleman Carmine mechs' in one instance, and 'Carmine light skirmisher' in another instance. If you want to be consistent, you should have referred to the latter as a 'light skirmisher Carmine mech; but this is awkward to use in practice as we normally do not attach the word 'mech' after 'light skirmisher'. Whatever the case, I suggest you simply place the word 'Carmine' in front of the mech archetype in order to remain consistent. So instead of using the phrase 'rifleman Carmine mech, it is much more convenient for everyone if you use the phrase 'Carmine rifleman mech'. The latter also rolls much easier off the

tongue."

Ves scratched his head for a moment. "You are right. To be honest, I never thought so much ahead that I would bump into this issue. Anyway, I agree that I should stick to designing two basic Carmine mechs that can serve as templates for many different Carmine versions of other mech archetypes."

"You should consider who you should put in charge of those projects." Gloriana said. "You

may be able to do it, but your workload is already heavy. It is better to put your trust in your colleagues and let them take the initiative, My Design Department isn't as small and haphazardly organized as it was in the past. We have hired many competent Journeyman Mech Designers, and while not all of them can adequately design first-class mechs that can meet the demand of first-raters, we can compensate for this by adding one or two first-class mech designers to the design team."

"Since you raised this subject, I suppose you already have a number of candidates in mind." Ves made a guess.

Gloriana impishly grinned. "That is correct. For the Carmine training and combat rifleman mech combination, I would like to put Harry Kaikkonen in charge. He is the most competent ranged weapon specialist in the Design Department. So far, he did not receive too many opportunities to stand out, but I believe he is competent enough to

lead this project."

"Are you confident enough in his work to let Aurelia pilot a Carmine rifleman mech of his

design?"

"Yes. As long as he has not made any major errors, I have no problem with this decision" Gloriana said. "Not that we will allow our precious daughter to remain bonded to a mass production model. Both of us must upgrade and customize her machine so that it best reflects her strengths and adequately compensates for her weaknesses. In fact, our daughter should not be the only person to receive this treatment. I am interested in designing a custom Carmine rifleman mech for myself."

"Wait. You... want to become a Carmine mech pilot?"

Ves became stunned at her revelation. He never seriously thought that his wife, who couldn't even hurt a fly, actually wanted to pilot a Carmine mech herself!

As far as he knew, Gloriana had always thought that fighting in the mud was beneath a

woman of her station.

"Do not form any misunderstandings. His wife narrowed her eyes. "I am purely interested in piloting a Carmine mech for two reasons. First, I want to be able to defend

myself as a last resort. Our clan has a penchant for getting embroiled in conflicts, and I

am tired of lacking any sort of agency in any dangerous situations. Second, I am a mech designer. If I want to comprehend the authentic piloting experience as closely as possible, I will have to experience it first-hand. The Carmine System may not be completely identical to the neural interface, but there should be enough similarities to derive a large amount of useful lessons. You should design a Carmine mech for yourself

as well."

"I already thought about it. My idea for my own Carmine mech is not that simple, though. I will probably design it at a later date because I need it to work with my phase

lord physique ... "

Chapter 6504 Talent Factory

Ves was not in a hurry to design his Polymetal mech.

He wanted to accrue more experience by designing other Carmine mechs first and learn how different people adapted to their own machines.

He was much more focused on designing a set of proper Carmine mechs that could service the needs of both part-time and full-time Carmine mech pilots.

He had two overall segments in mind for his next projects.

The first group was children around the age of 10. While they were limited to piloting just 'one' machine, Ves still felt it was worthwhile to educate them in the traditional way. At least, the mech academies should test the talent and qualities of the Carmine mech cadets to filter out the incompetent and focus on raising elites that would otherwise disappear due to their inadequate genetic aptitudes.

The end goal was not to raise a large army of elite Carmine mech pilots that could only fight so long as their Biodomes remained intact.

The real purpose for investing in them and drawing out their potential was to produce as many breakthroughs as possible!

Unlike qi cultivation, willpower cultivation did not depend on an orderly process.

Only by making the Carmine mech pilots persist in their training and throwing them in all kinds of life-and-death would they be able to sublimate their willpower.

The reason why ace pilots and god pilots were so rare in the Age of Mechs was because the total population of mech pilots was limited from the beginning.

Only 3.5 percent of the population had the potential to pilot mechs, but the proportion of actual mech pilots was smaller than that due to many reasons.

Now that the existence of the Carmine System opened up mech piloting to the rest of the population, a huge amount of people gained the opportunity to step onto the path of godhood!

The next Carmine mech design project that Ves had in mind was precisely meant to facilitate this process!

Ves briefly paused when he realized that the goals of his Rule Breaker Project overlapped with his current idea.

He inwardly shook his head.

The two may possess a few similarities, but they were ultimately different in many ways.

Unlike the MW Carmine mechs that he intended to design in a hurry, the RO Carmine mechs that he was formulating with the help of his wife were supposed to be based on much more proper and safer design principles.

The Red Ocean was his primary mech market. He had no thoughts about defying the laws of the Red Association. The mechers over here were his allies, so it was incredibly stupid to test their bottom line.

Ves needed to make sure he kept his thoughts about his RO mech design projects separate from his MW mech design projects. It would be catastrophic if he mixed them up by accident!

After a bit of effort, Ves managed to set aside his momentary confusion and focus on what was important.

"It sounds like you are serious about wanting Carmine mech yourself." Ves spoke up. "I applaud your initiative. I am happy that you are learning how to defend yourself. There are lots of scary enemies in this dwarf galaxy alone, so it is always better if you have the ability to fight enemies comparable to mechs. I don't expect you to be able to do anything more than that. You are not soldier, so there is a limit to how effective you can be on the battlefield. I would be much more reassured if you design a custom Carmine mech for yourself that is mainly focused on defense, escape and utility. You don't have to fire any weapons in order to make a contribution in battle."

Gloriana snarled and crossed her arms. "You are disrespecting me! I am not a fragile flower in a vase! You yourself are proof that mech designers can fight as well! You are correct that I will definitely design my own perfect Carmine mech for myself. I will need you to complete your Carmine rifleman mech design first so that I can develop a variant that matches my vision. You do not need to give me unsolicited advice. I am a woman!" Ves rolled his eyes. He had no confidence that Gloriana could make herself more effective on the battlefield than a run-of-the-mill mech pilot.

She did not possess any form of killer instinct, fighting spirit, grit and so on. She was a complete civilian who had only incidentally witnessed violence from a short distance away. None of her experiences indicated that she could withstand the rigors of battle. As much as she tried to claim otherwise, perhaps she secretly understood this truth as well, so she wanted to orient her own Carmine mech around a ranged combat platform. "Since you insist on going your own way, then be my guest." Ves eventually said. "If your protection detail does its job, there should never be a chance for you to rely on your own Carmine mech to fight your way out of a crisis. Something has gone horribly wrong if that is necessary."

The two turned back to the original topic.

Ves and Gloriana had decided that the best way forward was to design a Carmine ranged mech and a Carmine melee mech.

Gloriana's suggestion of letting Harry Kaikkonen, a second-class Journeyman Mech Designer who specialized in precision laser weapon systems, lead the former project was a bold proposal.

While Ves did not necessarily look down on Journeymen considering that he had

designed amazing machines himself when he was at that rank, he still worried whether Harry was up to the task.

"A Carmine mech design as important as this should be designed by a team of Master Mech Designers" Gloriana told Ves. "Yet when have we ever abided by this common sense? We rarely involved Master Mech Designers when we designed our highly successful mechs. Masters are strong, but we are not weak either. We do possess a number of shortcomings compared to proper Masters, but your design philosophy has so much promise that you are able to keep up or surpass their usual efforts. With at least one Senior Mech Designer contributing to the Carmine mech design project, we shouldn't be afraid that the end product will look crude and unrefined.

She was right about that. A lead designer did not necessarily have to be the best or most competent mech designer in the team.

Ves had collaborated with the likes of Master Moira Willix and Master Benedict Cortez in

the past.

Their fundamentals were much broader and stronger than his own, but they had been more than capable of withholding their full power and giving a junior like Ves enough room to utilize his design philosophy to the fullest.

Now, Ves had to take the role that used to be occupied by those Masters and make sure to give Harry Kaikkonen enough space to implement his own design philosophy.

"I haven't worked with Harry as of late, so I am not too sure if he is up to the task, Gloriana. I will listen to you and give him the benefit of the doubt. Who knows. Maybe he is just as brilliant as I am in my own field of specialization."

"You will not be disappointed by his performance." Gloriana boasted. "He has been working hard to keep up and surpass his peers. What I am impressed about the most is that he has studied your notes, textbooks and design files related to your luminar crystal weapons. He has even communed with the Illustrious One a number of times just to understand this alien tech better. At this moment, his mastery of luminary crystal technology cannot quite catch up to yours, but what makes him stand out is that he has already begun to forge his own path. He has attempted to apply his own design philosophy and design applications onto luminar crystal technology, allowing him to develop energy weapons with a significantly different style from yours."

Now that certainly sounded a remarkable accomplishment!

Ordinary mech designers should not be able to accomplish all of this in a short amount

of time. Harry Kaikkonen must have faced an uphill battle when he tried to comprehend this field of alien technology.

The study material was filled with gaps. Luminar crystal technology also operated on a different form of logic that was not entirely compatible with human thinking. Furthermore, the true potential of this tech was also intertwined with hyper technology

and E technology.

If Harry Kaikkonen could overcome all of these difficulties and achieve his own breakthroughs in the field of luminar crystal technology, then Ves felt much more reassured about letting him take the lead on this important. Carmine mech design

project.

"I didn't know that he had made so much progress." Ves admitted. "Serves you right for underestimating our Journeymen." Gloriana smugly grinned. "We are not the only mech designers of our generation to excel. You originally recruited all of

those young and talented Journeymen from the Fey Shaper Contest and other places in order to turn my Design Department into a talent factory. Enough time has passed for the most notable and hardworking among them to produce certain results. While I am not confident that Mr. Kaikkonen will be able to advance to the rank of Senior Mech Designer within the next 5 years, he is already considerably more useful than an average Journeyman."

Ves felt amazed that Harry was able to make so much progress in so little time.

He felt he had grown too arrogant as of late. It was not a good development for him to

feel that he had grown so quickly that he had left all of the Journeymen of the Design Department in the dust.

In truth, the gap between Ves and the Journeymen shouldn't be as vast as he thought. The latter were constantly working hard to improve and close the gap. That was expressly why Ves and the Larkinson Clan recruited them. Those without talent and growth potential shouldn't have been able to get in the first place.

Perhaps Ves had been shouldering too many responsibilities by himself to remember that he had gathered a lot of capable subordinates by his side.

Ves mistakenly assumed that only he, Gloriana, Ketis, Alexa and most recently Romanda were the only mech designers in the Design Department that could lead serious design

projects. However, the over 25 or so other second-class Journeymen that he had recruited during his past business trips were no pushovers either.

Now that they all had access to systematic cultivation, it should be a lot easier than ever

for them to break the shackles of their second-rater limitations and quickly master a lot

of new knowledge!

"I will have a good talk with him tomorrow." Ves promised to his wife. "At least the decision on who to appoint as the lead designer for the swordsman mech version of a Carmine training and combat mech is clear from the beginning. No one else but Ketis is qualified to take charge on this project. I won't pick a Master who is specialized in designing swordsman mech over a genuine swordmaster."

Gloriana had no objections to this choice. "Ketis will be happy to hear your decision. She

will want to do the best job possible in order to prepare the finest Carmine swordsman mech for Kirian. Her son is roughly as old as Andraste, so the two will most definitely

benefit from her work."

Ketis was also a Journeyman Mech Designer, but neither Ves nor Ketis had reasons to belittle the Swordmaiden for that. Her dual professions made it so that no one dared to underestimate her swordsman mech designs.

The two continued their discussion about how they should tackle the two upcoming Carmine mech design projects. They ended up staying awake past midnight and only reluctantly surrendered themselves to sleep in order to recover their mental balance.

Chapter 6505 The First Phase of the Carmine Revolution

The next day, Ves handled his daily chores before paying a visit to the design lab that he had not visited in many weeks.

This was the downside to going on a business trip. He became so caught up in other affairs that he got cut off from the intimacy of the mech designers who earnestly worked to make the Larkinson Clan more prosperous.

His relationships with the various mech designers also deteriorated due to isolation.

So much had happened during his last trip that it seemed as if an entire lifetime had passed.

Ves could barely recognize people such as Viktor MacMillan, Harry Kaikkonen, Adrian Marceau and Kelsey Ampatoch.

Only his relationship with Alexa Streon remained the same, and that was because they corresponded on a regular basis due to their master-disciple relationship.

Perhaps it was not all that bad for him to develop a bit more distance from the other mech designers.

Ever since he appointed Gloriana as the director of the Design Department, she had become their go-to leader.

It was better for his wife to manage relations with all of these restless talents as Ves simply did not have the time to waste on such trivial obligations these days.

Ves was completely fine with maintaining an aloof and distant image to these mech designers.

His many accomplishments already caused a huge gap in status to emerge between himself and his fellow professionals.

Even now, many of them looked up at him with eyes filled with awe and worship. The Father of Carmine Mechs was not an empty title.

The Larkinson mech designers couldn't believe that the person who single-handedly broke the genetic aptitude tyranny was the very eccentric Senior Mech Designer who they ultimately worked for! It was no wonder that he had remained so busy in the past half year!

Each of the lead and assistant mech designers felt incredibly lucky to be able to enter the clan and join the Design Department before Ves made his historic contribution to society.

So many people would have killed to be in their place!

In any case, since so many mech designers looked at him with starry eyes, Ves felt it was appropriate to hold an impromptu announcement.

He briefly exchanged glances with Gloriana before he addressed the gathered mech designers.

"Good morning, everyone. You have all seen the broadcasts of what I have done over at the Yernstall Central Star Node, so I will not bother repeating redundant information. Now you know why I have remained absent in the design lab all of the time. The Swarm Project's confidentiality was so high that I could only work on it in the more secure design labs deep inside the Tarrasque. Now that the existence of Carmine mechs and the Carmine System is out of the bag, there is no need to go through such lengths to protect our secrets anymore."

Everyone reacted differently to the revelation that they were in the presence of the man who made mech piloting possible for every human.

Ves could not perceive their true feelings in their faces, but he could sense it in their spirits.

Some of them felt jealous or envious of him. Others only had the purest admiration for his historic accomplishments. Then there were the arrogant and overconfident Journeymen who thought they could match or surpass his accomplishment one day! Ves silently marked the mech designers who fell in the latter group.

Only mech designers who did not get overly affected by other people's works and harbored big dreams about realizing great mech of their own had a higher chance of attaining greatness than others!

"The Carmine Revolution is upon us." Ves stated. "We have entered a historic period where the demand for a large variety of Carmine mech designs is overwhelming, but the supply for them is vastly insufficient. Already, third-party mech designers are busy at work with designing variants of the original Yellow Jackets, but there is only so much they can reshape a wasp mech before they override the effects of the Carmine System." A Carmine mech could only work if its Carmine System remained functional. Since it was a set of organic components that worked entirely based on E-technology, it became especially important to preserve Ves' design philosophy in the mech design. However, the more other mech designers tried to mess around with one of the Yellow Jacket designs, the more their own vision and design philosophy replaced the original essence that made it so valuable.

Go too far, and the Carmine System simply stopped functioning entirely because it had been reduced to a collection of useless organic tissue!

It was absurd to convert a low-end first-class Yellow Jacket into a high-end first-class multipurpose mech while still retaining the ability to form a Blood Pact!

There were only three ways to solve this problem.

The first solution was for Ves to design a high-end first-class mech of his own that could

be used as a base for a proper first-class multipurpose mech.

The distance between the two was much smaller, so there was a higher chance of

preserving the Carmine System.

The second solution was for a brilliant rational mech designer such as the Polymath to figure out how to simulate Ves' design philosophy and design a proper first-class

Carmine multipurpose mech.

Ves personally had little confidence that this could happen without his personal tutoring. Better Masters had tried and failed to simulate his design philosophy because it was so counterintuitive and fundamentally different from the established paradigms in the field of mech design.

The third solution was for him to realize his design philosophy and advance to the rank of Master Mech Designer.

Doing so would allow him to permanently carve his design philosophy to the Red Kingdom, thereby turning it into a public good that every mech designer could access. This was the most proper and systematic solution to disseminating the special design applications of successful innovators.

Since the second and third solutions were not viable at the moment, Ves could only address the needs of the mech market by focusing on the first solution.

Everyone else knew this as well, which was why they were looking at him with eager and hungry expressions.

Ves began to grin at his people. "Since the Yellow Jacket alone is not enough to satisfy market demand, we will have to make up for that. I don't intend for our Design Department to exclusively focus on designing Carmine mechs going forward, but we will definitely have to design a handful of them in order to give our society what it needs the most. For now, we will embark on two different Carmine mech design projects. Both of them will center around the concept of a training mech that can easily be upgraded into a fully capable combat mech after the bonded mech pilot has completed his academy training. While my complete ambition is to release a Carmine mech for every major mech archetype, my time and energy are limited, so I will only start with a rifleman

mech and a swordsman mech for the time being"

Everyone understood the logic behind the choice.

"I am sure that each of you are clever enough to understand that these two upcoming Carmine mech designs are also meant to serve as the templates of many different derivative Carmine mechs. I do not have the time to design all of those mechs in person, so that is where you come in. There are a broad range of specializations in our Design Department, so after we have concluded the two projects, I will leave it up to you to design the remaining Carmine mechs based on the archetypes that we have yet to

employ."

This delighted a lot of Journeymen!

"The work that you will soon embark upon will set the standard for Carmine mechs in

different product categories. Your Carmine mech designs might not be the best, but with my supervision, you can be sure that the Carmine Systems integrated in your

derivative works will remain fully functional, so you can rest assured that you can fully realize your own vision in your projects."

This was a small but important advantage that could only be attained by mech designers who worked alongside Ves!

Whereas third-party mech designers had to restrain their eagerness to transform an existing mech design into unrecognizable variants, the members of the Design Department faced no such limitations!

Ves just had to show up every now and then and make small contributions to the ongoing works to ensure his touch still remained alive and well.

This was the crucial advantage that would ensure that the works of these Journeymen were bound to grow popular and occupy an undeniable place in the history of mechs! "I cannot understate the importance of the Carmine mechs that we will design over the course of the next year or two." Ves seriously stated. "Each of us are less than a century old. Not a single Master Mech Designer is among us. It would be ludicrous to think that we can design a series of historic bestsellers that may also serve as the standards upon which other mech designers will use as the measuring sticks to their own interpretations of Carmine mechs. The opportunity to work on these vital Carmine mech design projects is a privilege, not a right. I expect for each of you to step up and carry your own weight. It would be best if you can develop innovations of your own that can make our collaborative works shine brighter. If we find out that you are not able to keep up with our demands, we will not allow you to work on the initial batch of Carmine mechs that we will release in the next few years."

He normally didn't care too much about what the Journeyman Mech Designers worked on at normal times, but this was different.

The early phase of the Carmine Revolution was all about setting standards and creating a base upon which all other Carmine mechs would flow out from. Ves felt an undeniable responsibility to ensure that the public properly adopted and familiarized itself with this wonderful new product category.

The care and attention he dedicated to the integrated of Carmine mechs in the Red Ocean completely contrasted to his much more reckless and haphazard attempt to dump the Rule Breaker Project into the Milky Way!

"Ngh..." Ves groaned a bit as he nursed his forehead.

Whenever he made this comparison, he felt as if his head was about to split in half. It

was too difficult for him to maintain two completely contradictory approaches towards

mech design.

It would have been better if two completely different mech designers tackled these separate priorities on their own, but that was not possible.

Ves could at least keep them somewhat separate if he worked on them sequentially, but

that was not possible either.

His mother expected him to complete the Rule Breaker Project in a couple of months,

and he could not afford to delay the development of his new set of training and combat Carmine mechs either.

He could only hold in his discomfort and forge his way ahead. So what if he became a

model mech designer in one galaxy, and an utterly depraved war criminal in the other

galaxy?

At least he would be able to service the needs of more people than most mech designers

dared to imagine!

One of the fastest ways for mech designers to progress was to make a difference in the

lives of many people through his works.

The more people he affected with his mech designs, the more a mech designer made his

mark on society, thereby making his presence more real and substantial! Nobody could become a Master Mech Designer by hoarding his mech designs and

refusing to share them to the wider community.

Ves enjoyed the rare but extremely precious advantage of being able to cater to two

different mech markets as opposed to one!

If he leveraged this advantage properly, it might not be unrealistic for him to advance to the rank of Master Mech Designer only a few years later than the Polymath!

"I probably won't be able to beat her record, but I will get close enough that it doesn't

really matter." Of course, Ves did not forget about the other requirements. He still needed to make a lot of progress in designing his elemental Carmine mechs.

Chapter 6506 The Luminar Inheritor

After Ves made his announcement to the Design Department and sorted out his messy thoughts, he called Harry Kaikkonen to his office.

Compared to the other Journeymen in the Design Department, Harry possessed a strong sense of confidence as well as admiration towards Ves.

Ves took this as a good development.

The second-class mech designer not only gained a lot of confidence in his recent improvement, but also maintained his strong respect towards his superior.

"Patriarch,"

"Take a seat, Harry."

Ves activated his desk terminal and called up the Journeyman's recent logs and design files.

Even though he only spent a short amount of time skimming through the records, Ves already gained a much more comprehensive understanding of what Harry Kaikkonen had been working on since he joined the Design Department.

"I see that you have devoted much of your energy to mastering luminar crystal technology. Can you tell me the reason why? I mean, you already developed your own understanding of energy weapon systems. For what reason have you decided to pursue this obscure and incomplete alien technology?"

"Because I can." Harry replied with a steady voice that conveyed his confidence. "Not everyone has access to luminar crystal technology to begin with, but I am different due to becoming a part of your clan and Design Department. Since you have made it available for study, I do not want to waste this opening by ignoring this tech and its obvious potential."

"Didn't you struggle to learn it due to its obvious alien technological principles, much of which has been lost in time? It is one thing to try to learn alien technology with full documentation available, but what I have been able to recover from an alien ruin and borrow from the Red Association is anything but complete. It is a risky choice to commit so much to understanding and mastering foreign technology. If you are too obsessed with it, you may end up losing the ability to progress further if you end up getting stuck in your studies and research into deciphering the working principles of luminar crystal technology,"

Ves spoke these words out of genuine concern for Harry's future. The Journeyman was one of the few ranged weapon specialists in the Design Department.

Even if it was not so difficult to hire young and talented Journeymen with similar specializations these days, it was troublesome to recruit and indoctrinate replacement mech designers.

"I understand your concerns, sir, but I have made my own calculations." Harry responded without losing any of his composure. "I stand by my choices. From the moment I first got in touch with luminar crystal technology, I fell in love with it. The power and potential of the energy weapons developed by this extinct alien race is far more advanced and multi-dimensional than any conventional human tech that I have encountered. Maybe the Rubarthans have developed powerful energy weapon systems that can rival the power of luminar crystal technology, but I do not think they can get close to matching the versatility of this alien tech. The luminar race is utterly unmatched when it comes to surpassing the limits of light and crystals. When they combine the two with their intricately powerful tech, they can produce miracles that almost no machines can match. That reason alone is enough for me to commit to this field."

The burning passion in Harry's eyes made it clear that the obsession had already taken root in his mind and spirit.

It was too late to dissuade the energy weapon specialist from falling into the rabbit hole of luminar crystal technology!

Ves slightly grimaced. "Well, you are an adult as well as a Journeyman Mech Designer. You are entitled to make your own decisions. Can you tell me what you are trying to accomplish by working so hard to master luminar crystal technology?"

"Why certainly, sir." Harry Kaikkonen already expected to answer this question, "As you know, my specialization lies in precision focused laser weapon systems. I rely on the use of organic focusing crystals that can dynamically adjust their convexity to produce precise focus at specific distances, thereby making my weapons more deadlier without increasing their energy usage. My work on these laser weapon systems has enabled me to develop a good foundation in crystallography, which has helped me understand and appreciate the value of luminar crystal weapons much better."

Luminar crystal technology was not just about producing exotic light beams, but also the crystals that were able to produce these bizarre effects.

"It is not the composition of the crystals that make luminar weapons so strong and effective." Ves argued. "The choice of materials definitely plays a role, but that is far from enough. It is the alien circuitry that is somehow carved inside the crystals that turns them into luminar crystal weapons. That is the true secret to this alien tech. How are you able to grapple with the luminar circuitry when no manual exists that can teach you how they work or how you can develop new patterns?"

Harry's smile faded a bit. "That is indeed a serious problem. I have tried my best to overcome the gap in theory. I have spent many days in the lab and workshop on experimenting with luminar crystals in order to gather large amounts of empirical data. I have spent my MTA merits to secure interviews with the researchers that have worked on luminar crystal technology to learn their personal insights. I have also taken the initiative to reach out to the design spirit known as the Illustrious One for advice and assistance."

As if on cue, Ves felt a new presence appearing inside the office.

The Apocalypse Warden bodyguards that were silently staying vigil in the same room suddenly grew tense, but Ves quickly waved at them to relax.

The new arrival was friendly.

In a clear show of support, the Illustrious One chose to manifest a small part of himself in this space!

Only a small and weak ball of light showed up. The design spirit clearly felt it was not necessary for him to present a more complete alien visage.

Even so, the Illustrious One already conveyed his sincerity by making this small effort. The ball of light enthusiastically bobbed up and down before circling above Harry's head. Ves was not too surprised that the Illustrious One had decided to hook up with Harry Kaikkonen.

The Journeyman Mech Designer was the second mech designer in the Larkinson Clan after Ves that took luminar crystal technology seriously.

As a design spirit that was based on the remnant of a dead but powerful member of the luminar race, the Illustrious One probably hoped that Harry Kaikkonen would either restore the forgotten tech of 'his' people or do it justice by building on top of the original alien foundation.

Luminar crystal technology was the only concrete legacy that its inventor race had left behind in the cosmos. It would be a pity for the scraps that remained after the erosion of time to become neglected to the point where they became completely forgotten. "Have you decided to become his patron?" Ves asked the Illustrious One directly.

The ball of light bobbed up and down as a clear sign of approval. "That is... good. I would have liked to spend more time on developing luminar crystal technology further, but... my design philosophy comes first. I cannot do this tech justice anymore. It is better if I can pass the baton to another qualified mech designer who harbors enough passion to bring it to a greater height."

Ves used to be a lot more passionate about luminar crystal technology, but that was in the past where he had the time and energy to engage in such frivolous explorations. He could have chosen to turn it into a serious minor specialization, but he eventually declined to do so. His development in this tech had stagnated as he spent his time on

other projects.

Aside from that, his inclinations had also changed. Rather than embracing the power of light, he had turned to the power of darkness.

While Ves did not regret the decision to turn the darkness E energy attribute into the third major component of his nascent domain, it definitely caused him to feel more estranged with the alien tech that he relied upon to make his ranged mechs stronger in

the past.

This may be one of the reasons why Ves did not hide any of his work and research related to luminar crystal technology and freely put it up for exchange in the Design

Department.

Letting Harry Kaikkonen 'inherit' his existing accumulation in luminar crystal technology resulted in the most ideal outcome.

Ves did not feel jealous or resentful at all that Harry had chosen to take up this mantle and earn the Illustrious One's friendship and support in the process.

The Larkinson Clan maintained relations with many design spirits. Ves may have created a lot of them, but his intimacy with them varied considerably. He was only particularly close with a handful of them. The remainder were free to make their own decisions on who they wanted to befriend.

As Harry continued to work with luminar crystal technology, the Journeyman would definitely grant the Illustrious One greater satisfaction than Ves had ever done! Even so, just having the intention was not enough. Harry needed to prove he had the ability to realize the lost potential of luminar crystal technology if he wanted to avoid getting stuck in his career.

"Gloriana told me that there is reason for me to feel assured that you are the right person to handle this difficult and incomplete tech.

"That is correct, sir. You still remain skeptical of my abilities. You are right to harbor doubts towards me, but I will prove to you that I can do more with luminar crystal technology than many other mech designers. Let me introduce you to Lightbringer, my

companion spirit."

Before Ves' eyes, Harry Kaikkonen began to withdraw a shining cube light from his

forehead!

Most companion spirits tended to take on the shapes of animals. A few came in the form

of humans, but rarely did they assume the appearance of inanimate objects.

Harry deliberately shaped his companion spirit into a cube, and not just any geometrically shaped object.

Ves widened his eyes as he gazed at a spiritual copy of a crystal cube!

"That is..."

"It is a close replica of the relic crystal cube that is used to burn the unique luminar

circuitry inside half-complete luminar crystals." Harry replied. "This is the core component of luminar crystal technology. In order to be able to understand and

eventually surpass the original boundaries of this alien tech, I turned my companion spirit into a cube myself. I hope this shows my depth of commitment to exploring this exotic tech to the fullest."

Ves still locked gobsmacked. He never imagined that Harry would make such a daring

and unconventional choice!

"Why a cube?"

Harry grinned. "Because according to the notes that you have left behind, luminar

crystal technology is inherently intertwined with hyper technology and E-technology. Without an E energy medium that is fully under my control, it is difficult for me to truly grasp the principles behind this tech. Ever since I transformed my companion spirit into this shape, I have already begun
to grasp those lost principles. I have only touched the surface of what is possible, but as I continue to explore the secrets of this cube, I am confident I can understand how luminar circuitry works."

"Are you trying to return luminar crystal technology to its former glory?" "Not exactly." The ambitious Journeyman shook his head. "As much as I adore this tech, I am ultimately a human, not a member of the luminar race. My ultimate ambition is to develop a humanized version of this tech that anyone can use. Once I have mastered luminar crystal technology to an extensive degree, I intend to move beyond imitation and restoration and go all-in on creation. It is my deepest wish to develop a human

derivative of this tech that is ultimately stronger, more rational and more easily

applicable!"

Ves finally learned why Gloriana had taken a liking to Harry Kaikkonen.

It turned out that both of them harbored similar ambitions!

They were both mech designers who aspired to master a difficult but promising form of

alien technology, only to convert the insights they learned into adapted conventional

technology!

Chapter 6507 ERC Luminar Crystal Weapons

Ves and Harry talked more substantively about luminar crystal technology.

Since both of them possessed deeper knowledge and insights into this alien tech than many other mech designers, they were quickly able to discuss in depth about advanced topics.

They both enjoyed the exchange as they possessed different interpretations of the same subject.

By sharing their own thoughts and perspective on the same tech, they expanded their horizons and learned new facets about luminar crystals that they never could have devised by themselves.

As they spoke, Ves became repeatedly impressed by Harry Kaikkonen's take on luminar crystal technology.

The Journeyman not only understood Ves' own writings and designs on luminar crystal weapons, but had already begun to branch out and develop his own knowledge base on the same subjects.

"Lightbringer has greatly assisted me in understanding how the extinct luminars treated their own tech," Harry said as his cube-shaped companion spirit bounced around his hands. "I have not been able to decipher the working principles or underlying theories that underpin luminar circuitry, but... I have accidentally managed to discover the functions of a few circuits that have remained unused in your previous products."

A few circuits inside Harry's companion spirit began to light up, causing it to convey a sense of... excitement.

The demonstration ended shortly after that, but Ves remained impressed by the mysterious display.

"What did you do, Harry?"

"I triggered the activation of the alien circuitry that I mentioned before. It is difficult if not impossible to understand their function from the outside, but now that my companion spirit is literally a close replica of a crystal cube, I have gained an instinctual understanding of it, which is why I know how to activate these circuits. After a few months of experimentation, observation and analysis, I have recently managed to convert these initial gains into a new design application. I believe that you will be pleasantly surprised by what I have managed to make. It is a luminar crystal weapon unlike anything else you have made."

"Oh? A few months is a remarkably short time for you to derive a completely new design application based on luminar crystal technology. Can you show me what you have made?"

"Why certainly, sir." Harry replied before glancing back at the two heavily armored soldiers dispatched by the Red Collective. "I would like to retrieve a firearm that I am

carrying on my person. Please do not overreact.""

Ves waved at his Apocalypse Wardens yet again to relax and withhold their judgment. His new honor guards were still unfamiliar with him, so they did not understand all of the rules and customs

that his previous guards had picked up over years of loyal service. Even if Harry wanted to attack Ves, the Journeyman had virtually no chance of success. Ves was not only enjoyed the protection of super-class defensive gadgets, but he was also a phase lord whose true body was much more massive than his human-scaled facade.

It was unthinkable for an infantry weapon to be able to threaten his life, so Ves did not care in the slightest if Harry pulled out a weird high-tech gun.

If Ves made a horrible misjudgment and got himself killed over it, then that was completely his fault.

Fortunately, that extremely unlikely possibility did not happen this time.

Harry simply retrieved an infantry-grade luminar crystal weapon.

A lot of thought and care had been put into its design and fabrication. The crystals were polished so smoothly that they almost became as reflective as mirrors. Harry also carved a lot of unnecessary facets that nonetheless made the outer components of the weapon look like a jewel in the shape of an energy pistol.

While the gun had not reached masterwork quality, it was still a fine artisanal product made with enough sincerity.

It was a clear expression of individuality and personality. Harry had clearly tried to distinguish his work from the luminar crystal weapons designed by Ves.

After showing off the gun while making sure to never point its muzzle in the direction of Ves, Harry began to look around for a target.

"Do you have a target I can shoot at, or should we move to the firing range?" "There is no need to bother with that. This is a second-class firearm, right? It is not even transphasic, though I see that it does incorporate a lot of hyper materials. Anyway, you can go ahead and shoot at one of my Apocalypse Wardens. Their defenses are in a whole different league."

"Are you sure? Are your guards okay with this decision?"

"Go ahead."

One of the Apocalypse Wardens merely responded by raising a thickly armored hand and performing an inviting gesture.

That was as clear of a signal as any.

Harry Kaikkonen rose from his seat, turned around and adopted a beginner's shooting stance optimized for the use of directed energy weapons.

Just because he dedicated his career to designing laser weapons and more recently luminar crystal weapons did not necessarily mean he excelled at using them in person! "I am about to fire a standard hyper laser beam in 3, 2, 1, NOW!"

FLASH!

The entire office lit up for a moment as a bright red hyper laser beam struck the azure energy shield generated by the Apocalypse Warden's sizable combat armor! Ordinary people would have squinted due to the sharp spike in luminosity, but a phase lord like Ves was able to observe the discharge with his eyes open.

Even though he had not pulled out any scanners that could spit out precise numbers, Ves had enough experience with laser weapons to roughly gauge the damage output of

the weapon.

"That is... not that different from a luminar crystal pistol of my own design" Ves honestly replied. "I take it that you have fired this shot in order to set a baseline, is that correct?" The Journeyman Mech Designer nodded while maintaining his rigid stance. "That is correct, sir. This is a degree of output that is attainable by the best luminar crystal weapons outside of masterworks that you can make based on the available materials and mass limitations. It represents the current ceiling of what our clan can produce. What I s that I have managed to surpass this baseline with my own small

want to show you

innovation."

"You mean the luminar circuitry that lit up in your companion spirit?" Ves asked with

growing curiosity.

"Yes. After months of research and development, I have successfully managed to devise a means to carve this luminary circuitry into my crystal products and connect it to a proper trigger. This adds an additional means of enhancing the firepower of the weapon that is not comparable to other existing methods such as true resonance. Let me demonstrate. I will use my companion spirit for this in order to amplify the difference, but I can produce this effect without it, though the results won't be as obvious."

Harry flipped a switch that caused the luminar crystal pistol to activate a different

mode.

He then proceeded to stuff his companion spirit into the weapon, causing the crystalline contraption to glow and feel as if it came to life.

No. That was not all. Something else was taking place. Ves narrowed his eyes. He did not sense that the flow of E energy radiation had changed all that much, but he was nonetheless able to feel as if more energy was accumulating from within than before.

"I am about to discharge a hyper laser beam that is considerably more damaging in 3, 2, 1,

NOW!"

FLAASH!

A slightly brighter and more powerful hyper laser beam flooded the office in red before

striking against the same azure energy shield of the bodyguard as before!

This time, the energy shield clearly struggled a little bit more to block the damage from

the gun!

Ves remained wide-eyed as he processed what he just witnessed. He had already managed to pick up a few clues, but it was only when Harry pulled the trigger that he was able to notice the difference.

"Have you managed to discern the difference, sir?" Harry asked as he slowly lowered his

gun.

"I think I do. If my suspicions are correct, you have somehow managed to pour your emotional excitement into the luminar crystal pistol. The new luminar circuitry pattern that you have managed to adapt into the weapon is strangely able to absorb your emotional energy and somehow alter the properties of the resulting energy beam. If my estimates are correct, mixing your excitement into the laser beam has caused it to become at least 10 percent more powerful!"

That was an amazing result if Harry managed to attain this performance boost without increasing the production cost of his luminar crystal pistol!

In other words, this proof of concept alone proved that Harry Kaikkonen was able to design a more powerful luminar crystal weapon than Ves himself!

While Harry had briefly explained that he was able to add this power to his luminar

crystal weapon due to learning how to properly utilize a luminar circuitry pattern, Ves was not able to replicate this process by himself at the moment.

Harry sat down again, this time with greater confidence than before. He carefully

secured his pistol and placed it on the desk.

Ves reached out and carefully lifted it to identify the components that could be

responsible for boosting its power.

"So this gun can weaponize the emotions of its wielder? How the hell did you manage to come up with this design application?"

"I believe that this is an inherent trait to luminar crystal technology. The Journeyman Mech Designer began to share his theory. "I cannot present you with any convincing proof, but my experience with working with luminar crystal technology has led me to form a hypothesis that this alien tech base is not only inherently compatible with E energy, but is also fueled and controlled by the strong emotions of its original alien users. Despite their small sizes, I believe that they possess a much greater capacity to experience emotions. They have sought to exploit this by developing crystal-based tech that can help them channel the power of their heart into much stronger and more

pronounced effects."

That was quite a lot of information!

Much of it may be baseless speculation, but Ves couldn't help but feel that Harry's unfounded theories may actually have a basis in truth!

Ves looked at the gun with a much greater sense of appreciation. "I never suspected that

this might be the case. It seems that even I haven't fully managed to discover this truth

about the luminar race."

"There is no need to blame yourself, sir. As far as I am aware of, the researchers of the

Red Association are also oblivious of this possibility. So far, I call a firearm that is able to make active use of this luminar circuitry pattern an emotionally reactive charged or ERC luminar crystal weapon. There are distinct strengths and weaknesses to this design application. The main advantage is that there is little burden to adding and activating the necessary luminar circuitry to a weapon. I cannot add it to any existing luminar crystal weapons, unfortunately, I would have to redesign and fabricate the luminar crystal rifles of all of the mechs that are making use of it in order to bestow them with

this benefit."

Ves casually waved his hand. "That's fine. It is already good enough that you can make the next generation of luminar crystal weapons stronger. What else?" "The most notable disadvantages are that it can only absorb one strong and highly focused emotion at a time, and that every emotion produces a different effect. The magnitude of the effect also differs depending on the emotion and other factors. Not every emotion that can be experienced by a human can increase the firepower of an

energy attack. There are those that can actually make them weaker. Finally, baseline humans cannot produce strong enough emotions to produce drastic firepower amplifications. The effect of ERC luminar crystal weapons cannot reach their full potential when wielded by ordinary soldiers. Conversely, their effectiveness increases much more dramatically when wielded by humans, as well as companion spirits, who are capable of producing much stronger emotions. There is one particular kind of user that has shown excellent compatibility with my new design application..."

Ves quickly figured out the answer.

"High-ranking mech pilots!"

"Exactly, sir!" Harry enthusiastically grinned! "Expert pilots and especially ace pilots should be able to produce vastly greater power amplifications with my ERC luminar crystal weapons! Would you like to view a test shot made by Venerable Davia Stark?"

"Show it to me already!"

Chapter 6508 The Power of Emotions

Ves did not have the faintest clue how a quality as intangible as emotions could enhance the firepower of an energy weapon to such an extent.

It sounded completely ridiculous on the surface. At least hyper technology had a positive effect on human machines because they somehow drew on the power of E energy radiation from the environment.

In this case, the chain of cause and effect were clear, logical and consistent, which was why many scientists easily adapted to hyper technology even if they lacked comprehension on the fundamental nature of hyper materials and E energy.

What Harry Kaikkonen managed to stumble upon during his explorations of luminar crystal technology did not conform to any existing paradigms.

It violated the law of conservation of energy, at least on the surface. It was just too strange to assume that emotions alone could directly generate a huge amount of joules of destructive energies.

Ves would not be too surprised by the amplification if an expert pilot such as Davia Stark wielded the ERC luminar crystal pistol.

However, the person who fired two test shoots at the Apocalypse Warden just now was a simple Journeyman Mech Designer!

Even if it appeared that the Journeyman in question not only possessed a companion spirit, but had already begun to practice one the auxiliary qi cultivation methods suitable for mech designers, his spirituality did not amplify his emotions all that much. What would happen if a different sort of extraordinary individual wielded the same weapon?

Expert pilots, ace pilots and god pilots were especially noteworthy for drawing strength from their convictions, which was directly related to their strong emotions! It was practically impossible for a high-ranking mech pilot to emerge that was completely devoid of emotions.

They were extreme figures who cared so much about their causes that their emotions practically exploded their willpower past the extraordinary threshold!

Strong feelings and motivations such as love, hatred, kinship, altruism, duty, greed and desperation enabled these mortal humans to surpass the limitations of their race and attain transcendence!

Ves had never heard of a technological solution that could enable 'ordinary' people to draw upon the power of their emotions to strengthen their attacks, especially to this degree.

Since a Journeyman such as Harry was able to attain a 11 percent increase in firepower just by channeling a specific emotion, what would happen if a true emotional powerhouse wielded the same gun?

Not everyone was equal. Compared to a mech designer, an expert pilot possessed much stronger emotions, and could even amplify them with their willpower!

Harry projected a piece of footage in the air.

It showed Venerable Davia Stark wearing a protective suit of armor while standing inside the shooting range that was used to test experimental firearms.

Harry appeared in the footage and carefully presented a much larger and more intimidating luminar crystal rifle to Venerable Stark.

Compared to the energy pistol carried by the Journeyman Mech Designer, the rifle handed over to Stark was clearly designed to serve as a scale model of a weapon that the Amaranto would wield.

The visual design of the weapon conveyed the impression that it was an evolution of the Instrument of Vengeance. Harry had taken the design of the original weapon and updated it with his own technological advancements as well as his own visual aesthetics.

"This is one of the early prototypes of the upgraded version of the Instrument of Vengeance." Harry explained just to make it clear. "Director Gloriana has graciously invited me to participate in the Amaranto Mark III Project for the purpose of furthering the development of the existing primary weapons of the Amaranto. This is the first test of the rifle that incorporates my new ERC tech."

Venerable Davia Stark held the weapon with great familiarity. She had used the real Instrument of Vengeance more times than she could count while piloting the Amaranto.

After Harry conveyed his instructions to her, he retreated to an observation room before the expert pilot began to assume a firing stance while bracing the long rifle against her shoulders.

It would have been a lot more convenient for her if she could anchor herself or the weapon onto a solid fixture, but that was not how the Amaranto opened fire with the Instrument of Vengeance.

Venerable Stark tried to imitate her living expert mech's shooting stance as much as her human body could accomplish.

This helped a lot as she was able to leverage her familiarity to draw upon all of the

skills that she usually employed when she was interfacing with her Amaranto.

A floating countdown appeared before and above her field of vision.

[3, 2, 1, FIRE!]

Stark pulled the trigger at the right timing!

The hyper laser beam that erupted from the long crystalline barrel looked powerful enough, but it also appeared rather lacking in Ves' eyes.

The metal target dummy's torso impressively melted a bit after getting struck, but the heat-resistant alloys still managed to do a good job at preserving the rest of the

structure.

All in all, the first attack was decent, but not much else. The only other praise that Ves could give was that Venerable Stark had managed to land a precise shot at the center of the torso despite handling the rifle for the first time.

The prototype weapon did not benefit from the willpower reinforcement of true resonance, nor the conversion of additional power derived from Harry's so-called ERC

tech.

It was just a standard hyper laser beam that was clearly meant to establish a baseline. What happened next caused Ves to pay a lot more attention than before. [Venerable Stark, please flip the switch that activates the ERC mode. After that, you should take the time to enter into a state of excitement.]

The female expert pilot frowned.

"I need clarification. Excitement is too broad of a word."

[By excitement, I mean the emotion that people experience after passing a difficult exam, winning a battle with minimal losses or winning a gambling bet. Perhaps it is better if you think about joy and happiness.]

These words almost sounded foreign to the woman who had once lost everything she cared about in her past life.

Try as she might, she clearly struggled to evoke genuine joy. Nothing she experienced in the past decade gave her an excuse to feel happy. All of those victories and all of the progress the clan had made failed to stir her heart.

Harry Kaikkonen clearly learned that Venerable Davia Stark tended to be one of the more serious and driven expert pilots, which was probably why he wanted to test his

ERC tech with this particular emotion first.

However, he clearly underestimated how little joy Stark actually possessed!

After a bit of struggle, Stark finally began to smile again, if only in a forlorn manner.

She clearly drew upon a memory from her past, back when the Sand War hadn't

ravaged much of the Komodo Star Sector.

It did not take her too much effort to discover that a small component had begun to suck in her relatively weak excitement.

The prototype weapon began to glow brighter as a consequence.

[3, 2, 1, FIRE!]

A brighter and distinctly more golden flash than before briefly overloaded the

recording sensor!

When the light levels quickly turned to normal, Ves shifted his attention to the data readings included in the log footage.

"An overall firepower boost of 23 percent!" Ves gasped! "And this is without leveraging the power of true resonance!"

Harry grinned and nodded. "That is correct. Excitement is one of the weaker emotions that Venerable Stark can muster, but she can already increase the power of her weapon to this extent. Do note that using excitement to augment an energy attack also adds other effects besides a straightforward enhancement in firepower, but the effect is not too consequential at this scale. I should also add that the boost derived from her emotions is stronger if she wielded my energy pistol as opposed to this scaled down version of the Instrument of Vengeance."

Ves looked intrigued. "Why not conduct the test with a luminar crystal pistol?"

"Because I calculated that it would be dangerous. There are good reasons why Davia Stark is wearing a suit of combat armor during these tests. I inferred that if the increase in firepower vastly exceeds the energy carrying capacity of the luminar crystals, they may be prone to malfunctioning or outright exploding. I even conducted

a test to confirm this theory"

Harry briefly projected a second piece of footage. This time, Venerable Stark wielded a prototype ERC luminar crystal pistol that looked well-constructed on the surface, but was actually a lot weaker beneath the surface.

This was a weapon that was deliberately made out of cheaper and inferior materials. The luminar crystals that made up the pistol shouldn't be able to handle too much

stress!

When Venerable Stark carefully channeled what little joy and excitement she possessed into the ERC luminar crystal pistol, nothing special happened at first.

It was not until she was close to opening fire that the weapon started to show clear

signs of instability!

The weapon started to release cracking noises. The brighter and more energetic light. glow grew more erratic. Heat started to emulate from the crystal pistol in an uncontrollable fashion!

Shortly after Davia sensed the mounting threat from the gun, she decisively threw it out, causing the weapon to explode shortly before it reached the target dummy!

Boom!

The explosion wasn't too dramatic, but it still could have hurt the expert pilot up close "Damn." Ves commented. "Are luminar crystal weapons that fragile?" "They can be under the wrong circumstances. According to my testing, I have ascertained that ERC luminar crystal weapons can only tolerate so much energy at a time, even when it is generated by the newly activated luminary circuitry pattern. There are several measures that can increase the maximum energy capacity of the weapon. You can increase the mass and volume of the ERC luminar crystal weapons. You can also use stronger and more superior materials to synthesize the crystals. You can also dial down the conventional power output of the energy weapon in order to stay within the safety limit."

All of that made sense. The first two measures were only relevant to mech designers.

The last measure gave the mech pilot a bit of agency on how far he or she should approach the limit.

"I understand, Harry. We will just have to make sure that the ERC luminar crystal

weapons paired to high-ranking mechs are larger and comprised out of quality materials."

Now that Harry explained one of the fundamental limitations of his new tech, he resumed the playback of the original footage.

[Alright. Now that we have tested the amplification bourne from your excitement,

please take the time to evoke your sadness and channel it into the same weapon.] This was much easier to accomplish for the expert pilot. Even though the tragedy that

had befallen the Komodo Star Sector had taken place a long time ago, Venerable Stark could never allow herself to forget those past traumas. Thinking of all of the populated planets that had been scoured by sand caused the

expert pilot to shake for a moment.

However, she eventually remembered her instructions. She steadied her stance and poured as much of her sadness into the weapon as she could.

A faint sense of gloom emanated from the footage as the luminar crystal rifle actually

started to dim in brightness!

[3, 2, 1, FIRE!]

The distinctly weaker and less threatening hyper laser beam that shot out of the

muzzle struck the target dummy with utmost precision.

Yet the firepower left much to be desired. According to the data readings, the attack

was at least half as weak as the baseline, making it seem as if leveraging the power of sadness had been counterproductive!

However, the power of sadness also induced another transform in the energy beam

that caused Ves to gain a much stronger appreciation of this attempt.

When he studied the target dummy a little further, he noticed that the beam may have

construct than an attack of this magnitude could produce! "This..." Ves couldn't explain how a single emotion could produce such a strong

deviation,

"I find it strange as well, sir. I have no theories to share with you that can explain why this happened. All I can state is that I have confirmed that leveraging the emotion of sadness can consistently produce similar results."

Chapter 6509 Davia Stark's Emotional Range

After demonstrating how Venerable Davia Stark could weaponize her excitement and sadness to produce energy beams with different effects, the test resumed.

She began to repeat the same sequence with different emotions.

[Disgust or contempt.]

This produced a dim, brown laser beam that only inflicted surface damage onto the targeting dummy.

Although Venerable Stark was able to muster up a lot of contempt before she channeled this emotion into her weapon, it did not appear to have done too much.

"I speculate that the luminar circuitry pattern converts the emotion of contempt into a different expression." Harry Kaikkonen said. "If you study the data readings related to the luminar circuitry pattern, you will notice that it exhibits energy activity that is more commensurate with higher activity levels. Yet for the effect to lead to an energy beam of reduced power seems wrong and counterintuitive."

"You think that it is producing another effect?"

"Yes. Maybe multiple effects. The potential issues are that the emotion of sadness cannot be properly expressed through a simple hyper laser beam attack, or that it does not have any offensive component to begin with. Luminar crystal technology originally encompasses far more than energy weapons. It is a complete tech base that can be used to generate or provide defenses, propulsion, heating, shelter and much more. The applications that we have managed to recover only encompasses a fraction of what luminar crystal technology is capable of. I believe that the

purposeful channeling of specific emotions may respond much better if we make use of luminar crystal devices other than firearms."

The theory made sense. In fact, Vesk knew it was true because he had visited the ruins of an ancient and decrepit settlement belonging to the luminar race in the past.

He had witnessed small alien structures made out of luminar crystals. While they were able to shoot light beams as a form of defense, they probably possessed a lot of other functions as well.

Even though Ves clearly witnessed the fact that luminar crystal technology was a complete tech base that could be used to construct all kinds of useful objects, he had always fixated on luminar crystal weapons and never thought about using the same tech for other purposes!

That was a pretty embarrassing cognitive error. It was yet another sign that he was ultimately not committed enough towards luminar crystal technology to do it justice.

Ves felt inferior towards Harry in this aspect.

Despite the fact that he was a Journeyman who had not yet made any notable accomplishments, Harry Kaikkonen's passion, sincerity and dedication towards luminar crystal technology easily allowed him to put himself in the shoes of the ancient luminars and imagi what they built with their dazzling crystals.

Having a passionate mech designer like Harry become the Larkinson Clan's go-to expert and custodian of luminar crystal technology worked out extremely well for Ves.

It was not just pure technological advancements that helped his clan grow stronger. It was the alternate perspectives and differences in mindsets that could truly lead to the development of fantastic innovations!

"You know, I never seriously thought about making a tower shield or a flight system out of luminar crystals before." Ves mused. "It may be interesting to explore whether you can make them powerful and cost-effective enough to utilize them over more conventional products."

"That would require a lot more research than I can currently devote my time towards. I am a weapon specialist. I will remain stuck in the trial-and-error phase for years if 1 attempt to develop a luminar crystal tower shield." Harry admitted.

"Maybe it won't take that long, but I understand what you mean. For now, energy weapons are the priority. Anyway, please continue the playback of the test footage. I am curious to see what other emotions can produce strange effects with your ERC luminar crystal rifle."

The projected footage continued to display the other tests.

[Shame or embarrassment.]

It took a bit of effort for Venerable Stark to channel this emotion. She had experienced plenty of shameful and disgraceful moments in the past. Each of them left horrible scars onto her heart.

Harry's request was not an easy one to fulfill for Venerable Stark. Her expression grew pained as she evoked a semblance of the great shame she felt after failing to protect the lives of billions of innocent civilians.

The energy beam fired from her rifle was tinged in orange, but also inflicted significantly lower damage than the baseline.

Again, both Harry and Venerable Stark suspected that the emotion of shame possessed another effect, but they did not have the capability to identify it at the moment.

[Love and affection.]

This was the first time Venerable Stark truly struggled to channel an emotion. No matter how hard she tried, she simply could not bring herself to muster any of the love towards her deceased relatives.

While she was barely able to muster up a bit of affection towards the Larkinsons she had fought alongside with for years, her effort was surprisingly feeble.

It was not possible to gather high-quality test data if Venerable Stark was unable to muster up enough love and affection.

However, Harry thought of a possible solution.

[Wait. Think about your relationship with the Amaranto. Your living mech has served as your most trusted and reliable partner for years. She has covered your back in every battle since she fell into your hands, and she will become even stronger and more magnificent after we have completed the Amaranto Mark III Project.]

As soon as Venerable Stark switched her mind to the Amaranto, her love and affection bloomed like the rising of a sun.

The power of her earnest devotion towards the Amaranto caused the luminar circuitry pattern to glow and accumulate considerably more energy than usual! Fortunately, Harry had deliberately constructed the luminar crystal rifle out of high-quality exotics and hypers, so it was still able to withstand the increase in power. As soon as Venerable Stark pulled the trigger, a bright and uplifting pink energy beam blasted forth and caused the torso of the metal target dummy to explode! "Whoa!" Ves reacted with surprise at this result. "That is a considerably impressive

result."

"The best part about it is that it should be replicable by virtually any of your customers." Harry said that a smile. "Regardless of their interpersonal relationships, any mech pilot who adores his living mech should be able to replicate this result. The stronger their bond towards their machine, the greater the increase in power output. This is the safest and most reliable means of weaponizing the emotions of a mech pilot that I have come across so far. Relying on other emotions can be dangerous."

"I know what you mean,"

It was not wise to instruct high-ranking mech pilots to fight while feeling overly

excited or sad.

Expert pilots and ace pilots were highly emotional to begin with. Their combat effectiveness and combat approach changed significantly according to their mood swings. Not all emotions were suitable for every occasion.

Love was therefore a practical choice as it lifted up the mech pilot's mood at the cost of only moderate mental distortions.

Of course, this was not a certainty. Venerable Stark's love towards her Amaranto was intimate but also fairly pure. This was not the case for other relationships. More tests needed to be performed in order to understand the full interactions between the emotion of love and ERC luminar crystal weapons.

The test continued.

[Altruism and sacrifice.]

This was a surprisingly easy mentality to channel for Venerable Stark.

She was a highly driven woman.

She no longer lived for herself, but for the sake of others.

Davia Stark had forsaken her personal life, her relationships with people and the mundane pleasures of mortal humans in pursuit of greater power.

The energy beam released by her luminar crystal rifle was pure white and

overwhelmingly bright!

The target dummy did not stand a chance.

There was a strong suspicion that the power of altruism also produced another effect, but none of the sensors and scanners managed to detect anything strange.

The high-tier expert pilot had to pause and catch her breath for a few minutes. While

Davia Stark had done well in channeling the power of altruism, she also expended a bit.

too much of herself in the process.

[Pride and arrogance.]

This session appeared less like a test of Harry's prototype ERC luminar crystal rifle and more like a psychological inspection of Davia Stark's mental state! Fortunately, the expert pilot did not appear to think much of it and obediently tried to channel the right feeling of pride.

Even though her pride had suffered multiple blows due to witnessing the rise of 3 ace pilots among her peers without being able to join them, that did not mean that Davia Stark had become humble all of a sudden.

She still possessed the pride and arrogance of a high-tier expert pilot that most pilots

still had to look up to! If that was not enough, her ranged firepower still remained the highest, at least until Saint Isobel Kotin was ready to get back into the saddle! The energy beam fueled by Davia Stark's pride was rich in purple. It demolished the torso of the target dummy, but also eroded the edges of whatever was left! Ves narrowed his eyes at this display. Parts of these demonstrations looked a little familiar to him. He had a suspicion that the colors corresponding to different

emotions might not be random. Soon, the final test had arrived.

After Harry gave Venerable Davia Stark a few more moments to reset her mind, he

finally request her to evoke a very common human emotion.

[Anger and rage.]

Venerable Stark did not need any time or special preparations to enter into this

mindset. She merely had to recall the many injustices she witnessed a long time ago in order to convert into a vessel filled with rage!

Her face began to scowl while her willpower subtly began to shake the surroundings

She lifted up the rifle, took aim at the latest target dumn

overwhelming anger into the weapon as possible!

and dumped as much of her

The luminar crystal rifle quickly began to get stuffed with hot and violent power!

The weapon already began to glow in red as if it was trying and failing to contain the

heat!

At one point, faint cracking noises started to sound!

[A dangerous situation has occurred! The prototype weapon's maximum energy limit has been reached! Venerable Stark, you need to open fire right away! The weapon cannot withstand so much fury!]

As much as Stark wanted to keep channeling more anger into the weapon, she had no

choice but to abide by the request.

The expert pilot's intuition already warned her that her weaponn could explode like a

bomb if she pushed its limits any further!

From the moment she opened fire, the sensors became flooded with red and heat. It took a bit longer for the optical sensors to restore their normal vision.

The entire target dummy got obliterated. All of it had disappeared to the point where

only scraps were left!

That was not all. The energy beam was so powerful that it had struck the azure energy

shield and drained its capacity by a huge margin to prevent any further damage from occurring!

"Whoa." Ves said as he became utterly impressed by how much anger could amplify the damage inflicted by the ERC luminar crystal rifle.

"Channeling the power of anger does not merely lead to a strong increase in

firepower." Harry added. "It also penetrates defenses easier and can destroy particularly tough objects."

That wrapped up the initial testing session.

Ves had gained a lot from watching the footage. I is understanding of ERC luminar crystal technology had not increased all that much, but he had a much better idea on how it could augment the firepower of his customers.

Chapter 6510 Classic Combination

"Damn, if your ERC tech is so powerful, we should implement it into all of the mech designs that make use of luminar crystal weapons!"

"That... might not make as much of a difference as you think, sir."

"What do you mean by that, Harry?"

As proud as the Journeyman may be for presenting successful research results to his superior, he could not hide the limitations and shortcomings of his tech.

It was best to be upfront about the downsides of his new design application in order to prevent the clan from making any premature decisions.

Harry pointed at the projected footage.

The aftermath of the latest and final attack still made a profound impact on Ves. What he did not notice at first was how visibly drained Venerable Stark had become. The expert pilot was made of sterner stuff, so she did not lose her combat effectiveness right away, but was clear that channeling her emotions and discharging them through the prototype weapon had exacted a toll on her mind.

This made sense. No source of energy was truly unlimited. There was a limit to how many emotions a human could generate.

Venerable Stark had entered a state of partial exhaustion that reminded Ves of expert pilots who had used up much of their extraordinary willpower.

"So... there is a limit."

"Correct" Harry responded. "This is one of the constraints of ERC tech. No matter whether we are talking about standard mech pilots, expert pilots or ace pilots, they can only muster up their emotional strength for so long"

Ves rubbed his hairless chin in thought. "I see. This is not as good as I expected, but it is still an acceptable limitation. Why do you say your new tech might not be as useful?"

"Because the amplification effect from channeling emotions becomes proportionately weaker when we are dealing with larger and more powerful luminar crystal weapons. So far, I have only given you demonstrations based on infantry-grade ERC luminar crystal weapons. I have yet to test my invention on a mech-grade luminar crystal rifle. I still need to perform calculations and make adjustments to the weapon design to ensure it can properly channel the power of a scaled-up luminar circuitry pattern." That sounded troublesome. Ves would have liked to get his hands on actual empirical data on how a mech-sized ERC luminar crystal weapon performed.

"So are you saying that if the weapon becomes dozens of times larger, the emotions

produced by a single human becomes so small in proportion that the amplification will become minimal?"

"Exactly, sir." Harry grimaced. "I assume that many forms of systematic cultivation that have recently become popular can strengthen a person's capacity to produce strong emotions, but it will take time to observe a massive difference. The living mech may be able to infuse the same emotion into the luminar crystal weapon as well for additional power, but I do not expect this to significantly change the outcome."

Ves frowned and tapped his fingers against his desk. "Then this tech should only be effective for expert pilots and stronger, is that what you are thinking?"

"That is my preliminary conclusion. All of this is still contingent on testing. Once I have worked out the kinks and developed the first prototype ERC luminar crystal rifle that is scaled for mech usage, I will transfer it to the expeditionary fleet so that Venerable Stark and a number of other Larkinson pilots can test its performance. I will be able to present you with more definite answers at that time. For now, it is safest to assume that my ERC tech is only effective for high-ranking mech pilots."

That was a small disappointment, but not an unexpected one. The logic was clear. There did not appear to be any obvious ways to boost the firepower of these weapons by exploiting this newly discovered circuitry pattern.

Ves accepted the advantages as well as the limitations of Harry's new design application.

Despite its many shortcomings, ERC tech still had a promising future considering that Harry Kaikkonen only just developed it. There was plenty of room for improvement.

Now that Harry had completed his new presentation, the two mech designers soon talked more specifically about the first mech design project where ERC tech may play an outsized role.

The Journeyman Mech Designer called up the incomplete design schematic of the Amaranto Mark III Project.

"The Amaranto Mark III Project is progressing slightly behind schedule, sir." Harry Kaikkonen reported to Ves. "Director Gloriana has invested her time and energy into developing the special structural composition of the expert rifleman mech. She has managed to solve many difficult problems related to developing an archemech frame that is largely based on Solarium and Divernas alloy. Her tests so far indicate that the physical defenses for the high-tier expert mech will not be too bad while still being able to provide strong light energy amplification."

Unlike the Riot Mark III Project and the Minerva Mark II Project which feature more balanced configurations, the Amaranto Mark III Project still adhered to the concept of extreme firepower.

Both Ves and Gloriana had made a risky bet by committing to a mech frame that largely amplified the expert mech's offensive performance.

To be honest, Ves already thought that the use of Divernas alloy would provide the Amaranto Mark III with a ridiculous degree of amplification compared to the previous edition.

Adding in ERC tech on top of that would multiply the firepower of the Amaranto even further!

Ves grew concerned as he studied the design schematics. He hadn't paid attention to the Amaranto Mark III Project as of late, but now that he took a look at it, he was not quite sure whether the mech frame could bear all of the power and stress of charging up a single shot.

What if the Amaranto Mark III blew herself apart in the process of charging up to full power?!

"Are the Amaranto Mark III and the Instrument of Vengeance resilient enough to withstand the energies that she is capable of gathering?" Ves asked.

Harry regained a bit of his confidence as he provided his answer.

"The director and I have spent many hours to fortify the Amaranto Mark III. The Instrument Mark III will become considerably larger and bulkier in order to raise its energy capacity. We will also take care to acquire and combine the best exotic materials regardless of the cost in order to increase the physical toughness and heat capacity of the luminar crystals. Furthermore, we have also chosen to use an uneven proportion of ChargeMate and Heatmate as the resonating exotics of the Amaranto Mark III in order to give Davia Stark further control over the emissions of her expert mech."

"ChargeMate and HeatMate? The classic combination of resonating alloys? As far as I can recall, they are ace mech-grade resonating exotics. I have no problem with incorporating them into the Amaranto when Davia Stark has broken through, but right now she is still an expert pilot. There are dangerous consequences to letting expert pilots attempt to resonate with materials beyond their ability to tame." This was not a trivial issue. According to the theory that exotic materials were the degenerated remains of powerful beings who lived in past eons, resonating materials happened to possess a touch of the lingering soul of those terrible life forms.

An expert pilot did not possess the resonance strength and domain to fully grapple with these dangerous resonating materials. They would have to fight an uphill battle every time they wanted to amplify their ace mech with true resonance.

What was worse was that the untamed resonating materials may actually produce a backlash where they actively attacked the expert pilot, possibly in the middle of an

ongoing battle!

Despite all of these known dangers, Harry Kaikkonen seemed confident in this design

choice.

"Director Gloriana has personally made the decision to integrate ChargeMate and HeatMate in advance. She judged that the usual conventions do not entirely apply in this case. Venerable Davia Stark's willpower is naturally more resilient than others, and she can also count on the support of her companion spirit Vail, which oddly takes the form of a black crow. Stark might not be able to leverage the full power of ChargeMate and HeatMate as a high-tier expert pilot, but even partial use can already make a difference considering how effective they are when utilized by ace pilots. This is not the first time mech designers have made this decision. Your wife is confident that it can work because the classic combination that you referred to has proven to be remarkably stable and devoid of many risks."

Ves could not fault Gloriana for her logic. He had investigated this classic combination in the past when he devised an energy weapon configuration for the Dark Zephyr

Mark III.

ChargeMate, which could produce additional electric energy upon resonance, and

HeatMate, which could reduce heat upon resonance, had both proven to be reliable in practically any high-ranking mech that heavily depended on the use of energy

weapons.

They expanded an ace pilot's options and made it so that the ace mech's performance could easily surpass its technological limitations by leveraging the reality-defying properties of extraordinary willpower.

"Heat management will be a huge problem if there are many factors that can amplify

the firepower of the luminar crystal weapon," Ves said in thought. "I can see why Gloriana wants to implement a lot of HeatMate into the mech frame. I suppose she could have chosen inferior expert mech-grade substitutes, but it will take a lot of trouble to disassemble the Amaranto Mark III and replace her resonating exotics if Davia Stark breaks through."

In other words, this design choice only truly made sense if Venerable Stark managed to advance to the rank of ace pilot in the short term!

If the guest pilot remained stuck as a high-tier expert pilot for years to come, then the

use of two ace mech-grade resonating alloys would turn into a shackle that held Stark

back! Though Ves felt the urge to suggest a more conservative approach towards the Amaranto Mark III Project, he eventually decided not to do so. His wife made this choice for a reason, and he was willing to respect her judgment.

Ves had always thought that Venerable Davia Stark was bound to become more powerful. She was far more motivated and emotionally invested in her goals than most other high-ranking mech pilots.

His only job was to supply her with the right living mech to ensure that this would

never become a limitation to her growth.

He had a small hunch that Davia Stark would not end up like his uncle or his grandfather. She might break through and become an ace pilot immediately or shortly after she received her long-awaited Amaranto Mark III!

If that was the case, then all of this effort would pay off, because there was very little

need to make too many changes to optimize the Amaranto Mark III for an ace pilot as opposed to an expert pilot!

"It is kind of strange that Gloriana did not opt to select a resonating exotic that can further amplify the firepower of the Amaranto Mark III." Ves commented. "We do not have access to materials that are strong enough to withstand the catastrophic buildup of energy if we made such a choice. Harry shook his head. "Besides, it is not worth it. Venerable Stark must already devote much of her concentration and energy into activating multiple forms of amplification. Trying to increase the firepower of a weapon with true resonance will wear her mentality down even faster. We wanted to extend the Amaranto Mark III's longevity in the field, so the combination of ChargeMate and HeatMate can facilitate this goal."

That made sense. There were potent resonating materials available that could directly

augment the firepower of an energy weapon. ChargeMate and HeatMate were a lot more flexible and could also be used to extend the deployment time of an ace mech. This combination was good for enabling the Amaranto Mark III to fight non-stop at lower intensities for many hours at a time.