Mech Touch 6971

Chapter 6971: Possible System Candidates

Ves gained a different outlook on the Mech Designer System after bringing Gloriana into the fold.

If he was able to give Gloriana access to its powerful features, then why not other trusted mech designers?

He might have known Alexa Streon for a lot less years than his wife, but his direct disciple had proven her loyalty, competence and diligence many times over. She should have been a prime recruit for the System as far as he was concerned.

Then there were other promising candidates. Zanthar Larkinson was not only family, but Ves had played an outsized role in shaping his education and attitude towards mech design.

Compared to Alexa, Zanthar also needed the System more. The third-rater did not enjoy the benefits of being born as a designer baby. He also did not have the benefit of particularly expensive and powerful cranial implants either.

The assistance provided by auxiliary qi cultivation may be able to help him narrow the gap between himself and first-class mech designers, but it should still take him far too much time to build up his foundation, especially since he had to play catch-up to the likes of Alexa Streon and Kelsey Ampatoch.

"I'll take a good look after him after I have finished with Alexa." Ves told himself.

Aside from these obvious candidates, Ves also could not forget about the ones that did not catch his attention on a regular basis but still showed good qualities.

For example, there were dozens of Apprentice Mech Designers who had been with the clan since the early days but never managed to break through for one reason or another.

Perhaps their talent and ability may not be so stellar, but their loyalty and other qualities made up for their shortcomings.

Ves did not really care too much about the former. Gaining access to the powerful features of the System could turn any average mech designer into a brilliant innovator.

What the System could not do was to make mech designers more grateful and loyal to him. This was why he needed to select for these qualities in advance.

Not every mech designer could be as staunchly loyal and trustworthy as Ketis. Ves did not ask for the impossible in every candidate. They just had to be good enough to reassure his concerns.

"I also can't forget about the mech designers who will soon complete their EdNet training." He reminded himself.

Almost four whole years had passed since all of those Journeymen first applied for this special benefit.

Familiar mainstays such as Sara Voiken felt they were being left behind by Ves and urgently wanted to undergo EdNet training in order to get 20 years worth of high-intensity study in an accelerated virtual learning environment.

In hindsight, Ves maybe should have been more open to inducting them into the Mech Designer System instead, but he was not ready to take such a radical and dangerous step at the time.

Did he regret his reticence? Perhaps, but there was no use crying over spilt milk.

Besides, it was not necessarily a bad idea to have a bunch of Larkinson mech designers go on exchange and study in a completely different environment from the Larkinson Clan.

All of those EdNet mech designers gained access to the exclusive or near-exclusive teaching resources of the Red Association.

By the time they returned to the Larkinson Clan in the near future, they would not only be fully capable of designing first-class multipurpose mechs, but also showcase numerous new specializations that were normally exclusive to RA mech designers.

Of course, spending 20 subjective years away from the Larkinsons most definitely alienated them from the clan. Ves needed to make sure to give them enough time to reunite with their old brothers and sisters and make sure they integrated back into the Design Department.

It might take a while before he became certain of their loyalty and commitment to the Larkinson Clan, but Ves was not in a hurry.

"What about people outside of the clan?"

While Ves felt a lot more reluctant to induct mech designers who did not originally belong to the Larkinson Clan, it was not an entirely unacceptable idea.

He needed to be truly certain about a mech designer's trustworthiness if he wanted to recruit an outsider.

In many cases, it was just better to recruit him or her into the Larkinson Clan first.

What about the cases where this was not possible?

Ves was already thinking about inviting Jovy Armalon to become a part of his secret club.

However, Jovy was a born and raised mecher. The Red Association's stamp on him was so ironclad that it was impossible for him to leave the superorganization.

Should Ves induct him into the System anyway?

"No. That is not a good idea."

The Red Association had already rolled out its own kinship network in order to root out cosmopolitan agents and other traitors.

As the inventor of kinship networks, he knew quite well that it was difficult for individuals to maintain their privacy if their spirits were permanently connected to a vast spiritual monitoring system.

While Ves was able to think of a few tricks to block or spoof the monitoring of the Larkinson Network, it only took one mistake to leak one of the greatest secrets in the Red Ocean!

Ves did not believe that Jovy was more capable than him in this regard.

Besides, ever since the mechers erected their own kinship network, they definitely developed it further according to their own requirements.

As one of the successors of the Five Scrolls Compact, the mechers most definitely possessed the knowledge to change and evolve the initial form of the kinship network into a much more robust product of E-engineering.

Ves suddenly made the realization that the Larkinson Network may in fact be one of the least developed kinship networks that were currently in existence!

After all, Ves never spent any time on updating it after he created it. He never assigned the T Institute to develop it further.

The only entity that could change the Larkinson Network was the Golden Cat herself.

Since she was the heart and soul of this kinship network, her growth and evolution also strengthened the Larkinson Network, but that was more incidental than anything.

If Ves wanted to make sure that the Larkinson Network kept up with the times, then he needed to put a serious team of cultivation scientists, E-engineers, computer scientists and other relevant experts on the job.

"Goldie." He spoke.

"Nyaaa!"

The Golden Cat manifested next to Ves and immediately pressed her warm and fuzzy spiritual body against his head.

"You should know what is on my mind, right? I think that you should devote a lot more attention to this. The Larkinson Network is probably severely out of date. You don't necessarily need to add more features, but you have to make sure to strengthen the existing ones. No matter what, outsiders should never be able to compromise it. Do you agree?"

"Nyaaa nyaaa!"

"I will make sure to draft a memo to the T Institute right away. The people over there should form a team or expand an existing one if they have one already. We cannot afford to neglect this priority."

"Nya!"

Ves did what he said. Even if he had been reduced to a lame duck patriarch, a task like this still fell within his authority. He did not think that the Saint Commander or whoever succeeded his position would mind.

He turned his attention back to possible System candidates.

"I'm sorry, Jovy, but as long as you are part of the Red Association, I can't invite you into my super-secret club."

The security risks were too great. Even if Ves felt that Jovy was trustworthy and dependable enough to know about the Mech Designer System, that definitely did not apply to the other members of the Association!

The only way for Ves to bring Jovy over was if the latter formally left the Red Association, but that was inconceivable.

The mechers invested too much in him. It took a fortune to raise him as a designer baby and feed high-quality resources to him as he grew up. He also benefited from the best education that the MTA and subsequently the RA could provide.

At this stage, Jovy was still horribly indebted to the Association. Even if he made enough contributions to pay back the total cost of turning him into an incredibly competent mech designer, that was not the intention of the Association.

The mechers never suffered a loss when they engaged in trades.

The entire point of pouring so many resources into Jovy was to hope that he would be one of the few truly successful mech designers who would become so productive in the future that he could pay himself back thousands of times!

After all, for every success case like Jovy, there were hundreds if not thousands of lesser mech designers who failed to live up to their potential. It was pretty much hopeless for these losers to pay back the cost of raising and educating them for so many years.

"If I was in the Association's shoes, I would never let Jovy slip from my grasp."

That was especially the case since Jovy's high-potential design philosophy was steadily beginning to realize its amazing potential.

From what Jovy was able to do with the Chaos Armor of the Riot Mark III Project, Ves simply could not understand how his fellow Senior Mech Designer was able to contort the laws of reality to the point of actively weaponizing the power of luck!

This was such a unique and amazing operation that anyone could see how much more frightening Jovy's design philosophy could become once he advanced to the rank of Master Mech Designer.

At that point, Jovy would probably be able to affect the probabilities of many more phenomena.

This may even include the Holy Grail, which encompassed the chance of triggering the breakthrough of a mech pilot!

Anyone with a brain would treat Jovy like a treasure. It was already generous that the Survivalist Faction allowed Jovy to continue to serve as a liaison to Ves. The mechers correctly assumed that Jovy would be able to make greater progress if he continued to stay by the side of his old friend.

"The only way I can recruit him is if the Red Association collapses."

What was the probability of that happening? Close to zero.

Ves pushed aside all thoughts of trying to induct Jovy into the System and began to think of other possible names.

Tristan Wesseling?

He shook his head. "No."

Tristan possessed a proud and independent streak. Ves had already invited the former Fridayman to join the Larkinson Clan, but the Journeyman Mech Designer still honored his oath to the Colonial Federation of Davute.

While Ves could respect a mech designer that stayed true to his promises, it was a pity that this also made Tristan less trustworthy on a personal basis.

"Let's see how long he will keep this up when Davute finally falls."

Despite the Saint General's heroics, the damage to Davute's infrastructure continued to accumulate.

The alien invaders were inflicting considerably more damage to the defenses and industries than the Davutans could repair in time.

Once the Davute System inevitably collapsed, that should be the end of the second-rate state.

Ves would definitely approach Tristan again at that time, but his offer would not be as generous as before.

"Perhaps it is already too late to bring Tristan into my inner circle."

That was regretful, but Ves would not lose any sleep over it. The man already had his chance.

Aside from Tristan, Ves could not think of any other mech designers that he wanted to induct into the System.

He had developed a working relationship with numerous respectable Master Mech Designers, but Ves completely rejected their candidacy.

The System provided the greatest value to the young and ignorant. The older and more knowledgeable the mech designer, the less they valued its features.

To most Master Mech Designers, the System might be able to help them overcome their bottlenecks and help them advance to the rank of Star Designer, but Ves was not too certain about this guess.

Besides, Ves did not have much confidence in his ability to control wily old Masters. It was best not to tempt fate.

"I should stick to setting my sights on the young and impressionable low-ranking mech designers of the Design Department. They are much easier to fool than these old geezers."

Chapter 6972: The Body of the Woodsap Mech

Ves ultimately concluded that if he wanted to expand the user base of the System, it was better to set his sights on his fellow Larkinsons.

He did not know too many outsiders who he could trust with a secret of this magnitude.

Rather than take any further unnecessary risks, it was best to keep this as in-house as possible.

That came with several disadvantages. Ves feared that the lack of diversity in perspectives might cause his expanding club to still remain too insular and blind to other possibilities.

However, this was an acceptable price to pay for a greater chance of maintaining confidentiality.

He was quite aware that the probability of leaks increased by a considerable rate with the addition of every additional mech designer.

From the moment he brought in Gloriana, Ves already knew in his heart that the secret would come out sooner rather than later.

Ves did not mind this very much so long as he had enough time to stand his own ground.

"I will need to become a Master Mech Designer at a minimum if I want to fend off most sources of trouble."

While he would still attract a lot of unwelcome heat if he became known as the carrier of the Mech Designer System, his right to speak was much greater if he became a Master Mech Designer by that time.

Now that Gloriana had entered the fast track, Ves had to take his competition a lot more seriously than before.

This was why he soon set aside his considerations regarding the System and directed his attention to one of his ongoing mech design projects.

The Arboreal Project did not see much progress in the last few months. The main reason why the biomech design still remained in a very unfinished state was because the Elemental Carmine mech relied heavily on Transphasic Ebony Wood or TE Wood as its principal organic material. This was a new material derived from the Ebony Wood once produced by the Emperor Tree. It possessed a lot of special properties that granted the first potential Woodsap mech a lot of unique advantages, but the problem was that the Larkinson Clan and the Devos Ancient Clan first had to master this new type of wood!

The biotech scientists of both organizations already spent months on researching, improving and optimizing TE Wood. The more time they spent on studying this material, the more data and insights they gained.

The most ideal scenario would be to give these biotech scientists several years to thoroughly understand every facet and trait of TE Wood in exhaustive detail.

Once they developed a fairly complete understanding of TE Wood, Ves could obtain all of their research results and readily apply all of the valuable insights into designing a Woodsap mech that fully utilized the advantages of this organic material.

Unfortunately for Ves, he could not waste so much time.

He may be willing to give the researchers more time to complete their studies if there was no hurry, but time had become especially valuable as of late.

Therefore, against his better judgment, he transmitted a notification to the science teams to hurry up and summarize their findings regardless of their completeness.

Ves could no longer wait any longer. He needed to make substantive progress in the Arboreal Project and strive to complete the design within a reasonable timeframe.

Since he was cooperating with the Devos Ancient Clan, he should be able to rely on its formidable infrastructure in order to speed up the project, so the ideal scenario was to complete the first functional prototype within 4 to 6 months.

It may take a few more months to test and refine the initial design until it reached an acceptable state of maturity.

Even then, Ves was very much aware that this would amount to another rush job.

This would not be the case if he designed an ordinary living mech, but the Arboreal Project was anything but normal.

If the mech design met all of his expectations, then it would become the first truly advanced Carmine mech in existence.

Not only would it enable norms to become mech pilots, but they would become forever changed by the organic mech they had bonded.

Based on what happened with Lanie Larkinson, Ves expected this transformation to become so profound that it could give the Terrans what they need to slow down or even stall the native alien offensive!

As Ves began to make the arrangements, he soon received a direct call request from a familiar collaborator.

The physical projection of Master Laila Rebecca Devos soon appeared inside his office compartment.

"Good afternoon, Ves." She briskly greeted him. "You have decided to advance the timeline of the Arboreal Project."

"Yes. You should understand why I have made this decision. We could wait longer to gain a more thorough understanding of TE Wood, but by that time it is questionable whether the Terran Alliance still remains standing."

The Terran Master Mech Designer frowned. She obviously did not like how defeatist that sounded.

Fortunately, Ves was not a Terran, so he was allowed to make such remarks.

"Your decision to speed up the Arboreal Project is inconvenient. It threatens to exclude a major advancement in the applicability of the first version of our Carmine biomech."

Ves raised his eyebrow. "What are you talking about?"

"We have devoted a research team into investigating whether we can implement a replica of a human nervous system into a biomech based on TE Wood." She explained. "This is not a new concept in biomech design. Since the beginning, many professionals have realized the possibility of turning an organic mech into a scaled-up copy of the human body. If such a biomech can be developed, then the mech pilot can effectively control his biomech as if it is little different from his real body."

This went way further than what a Blood Pact was supposed to enable.

The Blood Pact only created a mystical data connection between the Carmine mech pilot and the Carmine mech.

It did not inherently make the mech easier to pilot, though many did have the illusion that this was the case.

However, it did not change the fact that Carmine mech pilots actually had to learn how to pilot a war machine if they wanted to utilize their bonded Carmine mechs to the fullest.

If the control system changed to the point where the Carmine mech pilot was actually able to inhabit the Carmine mech to the point the latter behaved exactly like his own body, but larger, then that would represent a paradigm shift!

"I see. If your research team can make this happen, then that will massively lower the learning curve of piloting the Woodsap mech!" Ves reacted in surprise.

Master Laila Devos leaned forward. "The Yellow Jacket mechs have sparked a revolution. For the first time, norms can pilot mechs regardless of their genetic aptitude. However, there are those among us who do not think that you have made mechs accessible enough to the common folk. You have left this job unfinished. Far too many people are being hindered from becoming qualified soldiers that are ready to deploy on the battlefield because they are unable to control their Yellow Jackets effectively enough. They lack training."

This was the first time that anyone told Ves that his Carmine mechs were 'incomplete'.

It would have been outrageous for anyone to claim that a mech that was able to turn any human into a mech pilot was not feature complete, but the Terran Master dared to make this statement!

Of course, the two were friends who had already grown familiar with each other's temperament, so Ves did not feel insulted by this remark.

A good mech designer must always have the realization that a mech could always be better.

If a machine had become so perfect that there was no conceivable way to improve it anymore, then there was little point for mech designers to continue working.

While Ves did not think his Carmine mechs were only half-complete, he did not think they were finished either. He wouldn't have come up with the Elemental Carmine mech concept otherwise.

What he did not expect was for the Devosans to have a different idea on how to improve his Carmine mechs!

"Why do you want to apply this change?" He asked. "Shouldn't it be enough to grant first-class or even second-class C and D-grade mech pilots the ability to pilot the equivalent of a first-class multipurpose biomech?"

The older woman shook her head. "No. It is not enough anymore. We are not content with enabling our first exclusive Carmine biomech to turn into an upmarket and organic version of the Yellow Jacket. What we desire the most is to incorporate a selection of our finest biotechnology and biomech applications into the Arboreal Project. We do not want to become known as your assistants or technical consultants. We want to be your true and equal partner, and that means that we must introduce enough innovations that people will not forget our contribution when we finally release the results of the Arboreal Project."

What an ambitious goal. Ves fully recognized how difficult it was for the Terrans to earn a respectable amount of credit under the circumstances.

The star of the show was clearly the Elemental Carmine System. By replacing regular human blood with the sap of TE Wood, the future pilots of the Arboreal Project would gain their own form of extraordinary power.

The Terrans faced an uphill battle if they attempted to match the amazing qualities of a Woodsap mech with their own biotech attainments.

"I have to admit that your idea sounds intriguing." Ves admitted. "Since you Terrans have already developed such a solution, why haven't I heard about it before?"

"There was little point to it at the time. Think about it, Ves. The reason for improving the control system of a biomech is to make it easier and faster for humans who are not trained in mech piloting to be able to move it as they desire right from the beginning. However, only potentates can pilot the modified biomechs. There was no reason in the past to treat them as conscripts and attempt to rush them into combat when they can all become proper mech pilots after a decade or longer of proper training."

"I see. The modified biomechs ended up as a solution looking for a problem." Ves concluded.

"Exactly. It is only now that the right problem has arrived. Carmine mechs enable any human to pilot them, but they still need at least 4 to 5 years of intensive training at minimum to reach an acceptable standard, and that is when you have simplified the configurations of the machines in question. The solution that we are proposing will remove the need for all of this training. Our ultimate goal is to convert the best and most elite infantry soldiers in our service into Woodsap mech pilots that can instantly translate their existing combat training into effectively using their new biomechs on the battlefield. They only require a handful of months of theoretical training courses that deal specifically with mech combat that can easily be completed in advance."

Ves understood what the Terrans sought out of the Arboreal Project. They recognized the potential of the Yellow Jacket and other Carmine mechs to turn ordinary citizens into effective combatants.

Yet they were too impatient to wait a handful of years for even the most prepared Carmine mech pilots to get ready for battle.

If the Arboreal Project was able to incorporate a control system that turned the act of piloting a Carmine mech into a more direct simulation of controlling a human body,

then that could save the Terrans valuable time in raising large amounts of Carmine mech units!

"This idea has a lot of potential." Ves grew awed by the audacity of this vision of the Arboreal Project.

"As the Father of Carmine mechs, you are destined to develop many different variations of your greatest work up to this date." Master Laila Devos spoke. "Nevertheless, we believe that turning your only Carmine biomech into a more accurate surrogate for the human body can turn into an unforgettable contribution to our society. Only biotechnology can make this happen, and we happen to excel in this field. Let us help you define the Arboreal Project. We are merely asking you to be more patient and wait until we have developed a more refined control system that is compatible with TE Wood."

Chapter 6973: Terran Science

Ves decided to give the Terrans a chance.

Although he could not tolerate a huge delay, it did not strain his patience too much if he delayed the project by two or so months.

He already made an informal agreement with Master Laila Devos that if the Terrans failed to make substantive progress in their attempts to make their alternate control system compatible with TE Wood, he may decide to go ahead with the Arboreal Project without this key advancement.

Mech design was not always about designing the best mech possible.

It was about meeting the demand of the customers in a timely manner.

Few people thought it was ideal if it took 5 or 10 years for them to finally get their hands on a product that could meet their requirements and solve their problems.

Under certain circumstances, it was better to deliver a more rudimentary product within a year that only satisfied some, but not all of their requirements.

So long as the product was good enough to help them complete their most urgent objectives, the shortcomings were not too critical.

Ves now faced such a situation. He knew that with the way the Red War was unfolding, the Terran Alliance needed an effective solution sooner rather than later.

How long could its frontlines last?

Would a few months of delay cause the Caesarion Upper Zone to collapse before the Terrans could roll out enough Woodsap mechs to reinforce the depleted defenders?

The original plan called for designing Woodsap mechs with the assumption of enabling mech pilots with lower-than-average genetic aptitude take control of more advanced war machines.

What Master Laila Rebecca Devos proposed to do instead represented a pretty radical change of plans.

The revised vision of the Terrans admittedly made the Arboreal Project a lot more innovative and useful, but could Ves and everyone else afford to wait that long to realize this more perfect implementation of a Wood Elemental Carmine System?

That was the dilemma that Ves faced as a mech designer.

He refused to believe that Master Laila Devos failed to recognize this dilemma.

When she became confronted by this junction, she resolutely chose to bet on the more promising but also time-consuming choice.

Whether she had made the right choice or not, she and by extension the Terrans would rather invest additional time into developing a more mature and developed Woodsap mech than to settle with rushed and inferior goods!

They made this choice despite the awareness that a rushed Woodsap mech design may be just what they needed to stem the bleeding and give their defenses a crucial wave of timely reinforcements. This either told Ves that they were willing to bet the future of their colonial superstate on this gambit, or... they were not too concerned about the consequences of delaying the Arboreal Project.

"The Terrans are not stupid." Ves reminded himself. "They are among the most careful and cautious thinkers among the first-raters."

He spent enough time on New Constantinople VIII to know that the Terrans never made any reckless choices if they could help it. They liked to deliberate on possible solutions in committee so that they became certain that they chose the right direction to go forward.

While this decision-making model often caused them to be slow to react to rapid changes, the Terrans nonetheless managed to preserve their legacy since the dawn of humanity's ascension into the stars.

Even when they were faced with collapse in every direction, the Terrans remained steadfast in their steady and careful approach towards decision-making.

If the opinions shared by Master Laila Devos did not merely reflect her personal attitude, but instead conveyed the consensus of the leadership of the Terran Alliance, then they most definitely had a trump card in store!

"What are they relying on?" Ves wondered.

A few possibilities came to mind.

Perhaps the Terrans were almost ready to enact their mysterious plot to recapture the sovereignty that they surrendered to the mechers and the fleeters.

Ves had never heard about it again, but he most definitely had not forgotten about it. The Terrans, the Rubarthans and possibly other conspirators must be maneuvering behind the scenes.

As far as he knew, they were waiting for the right timing to launch their ambitious plan to declare their independence from the hegemonic regime originally established by the mechers and the fleeters. Were they already closing in on that fateful date?

The Terrans may also be thinking about forcing their peak ace pilots to simultaneously step onto the road to no return.

Most of their greatest heroes would undoubtedly be found wanting and perish, but if two or three of them managed to survive and complete their ultimate apotheosis, then it may be worth it in the end!

Still, Ves felt it was way too soon for the Terrans to resort to this measure. They needed to mine a lot more superdimensional matter in order to complete the superdimensional conversion of many more peak ace mechs.

That would definitely give their god pilot candidates a much higher chance of succeeding in their attempts to attain godhood!

A more direct and extreme measure would be to deploy weapons of mass destruction en masse. Who cared about taboos when the Terran Alliance was on the verge of losing a crucial and strategically important Upper Zone?

Although the massive escalation would undoubtedly invite a devastating counterreaction from the native aliens, if red humanity was already on track to lose the war according to its current trajectory, then why not flip the board and see what happened?

Any change was better than the current status quo!

Ves had an idea that this possibility may already be fairly close at hand.

It only took a single rogue element that happened to have an antimatter bomb or equally devastating superweapon on hand to push the metaphorical red button.

The rogue operators may be a Terran, a Rubarthan or maybe even a third-rater.

So long as they were humans and so long as they launched enough weapons of mass destruction to rule out accidents, then the native aliens would most definitely choose to reciprocate!

This was despite the awareness that their own territories risked suffering much more harm in response!

After all, human-occupied space was tiny compared to the territories originally occupied by the native aliens.

If red humans became vindictive enough, they could load their stealth vessels with as many antimatter bombs as they could fit before sending them off into alien space.

These stealth vessels could sneak close to an important alien planet, discretely drop their payloads before slipping away unnoticed.

If they repeated this tactic enough times, they could unleash a wave of devastation that would end up killing tens if not hundreds of times more aliens than any humans that moved into the new frontier!

"This is an extreme solution. It is better if the Terrans do not open this particular Pandora's box."

He may be overthinking the situation. Perhaps the simpler explanation was that the Terrans had enough faith in the defenders to hold the line long enough to wait for the arrival of the improved Woodsap mechs.

This may especially be the case now that the Premier Fleet had launched and was even now entering the war theater.

If the Saint Commander and the forces at her disposal managed to inflict enough damage to the native alien raiding operation in the surrounding regions, then that would definitely buy the Terrans a lot of additional time!

"This is an unexpected connection."

This explained why the Terran Alliance offered such generous incentives to encourage the Premier Fleet to start its first campaign around the Caesarion Upper Zone.

Ves did not realize that the Terrans tied these two events together.

He found it absurd that he failed to recognize this chain despite the fact that he was directly involved in both affairs!

"Oh well. At least I eventually figured out this connection."

The awareness brought him greater insight, but did not really change his outlook all that much.

He just became a lot more invested in the success of the campaign that was about to kick off in a big way.

Ves could still think of a few ways to increase the success rate of the Premier Fleet's intention to raze hell in alien space.

However, all of this might not end up making much of a difference if the Terrans took too much time to make their special control system compatible with TE Wood.

In order to gain more insight on what the Terran biotech experts were up to, he decided to call Vice Director Maria Abselon.

"If possible, I highly recommend that you acquiesce to the Terrans and give them the time they need to develop a working implementation of their special tech."

"Are you telling me that because you used to be a Terran biotech researcher yourself?" Ves suspiciously asked.

Maria responded with a gracious smile. "The Terrans exiled me from their scientific community, remember? I hardly have any goodwill left towards my former people. You cannot believe how much our science has become tainted by infighting, theft and political interference. It cannot be helped. Despite how wealthy we appear from the outside, our research eats funding and resources like voracious black holes. It takes an astronomical amount of funding to make significant advances at this level. The Terran ancient clans can only support so many research projects at a time. I went into this arena without sufficiently understanding all of the unspoken rules. I should have been more cautious and forbearing, but the Terrans ultimately could not tolerate my attempts to assert myself."

Ves frowned in response. Her evaluation of the Terran scientific community was quite negative.

If pure research had to make way for external interference to such an extent, then where did that leave his Arboreal Project?

"Do you think the Terrans will take longer than desirable to complete the revised control system for our collaboration project?"

"Actually, no." Maria Abselon said. "Despite my harsh words towards my former colleagues, their abilities should never be cast in doubt. If the Devos Ancient Clan and other ancient clans are united in their purpose, then this research project will receive an unprecedented amount of support as well as political protection. The biotech scientists will constantly have to account for their progress, but they do not have to fear any other form of interference. This is close to an ideal situation for them. Their productivity will most likely multiply by a factor of at least 3 in my estimation."

"Are you personally familiar with the special control system that the Terrans want to implement in the Arboreal Project?"

"Not specifically, no." The vice director shook her head. "I specialize in exobeast research. The study of developing new ways to control a biomech falls into an entirely different specialization. However, if my speculations about the possible direction chosen by the relevant Terran scientists are accurate, then my expertise may not be as unrelated as I initially assumed."

Ves deduced the possible connection. "Are you claiming that the Terrans will attempt to base their innovative control system on the nervous system of comparable exobeasts?"

The physical projection of Maria grinned. "Not just exobeasts. Phase lords as well, particularly humanoid ones. The latter's multidimensional anatomy may involve

several anomalies, but you cannot deny that the body of a human phase lord is the most suitable template for this research initiative."

Ves blinked. "Are you saying I should donate my body for Terran science?"

"It may not be necessary, sir. The Terrans are resourceful. Even if they do not have access to the research data relating to human phase lords, they can still reference data related to orven phase lords. There is no shortage of that. There are still many differences between human and orven physiques, but they at least have the same overall body shape and extremities, so it will take less time to convert the data into useful solutions."

"...That sounds like a lot of trouble. Isn't it faster and more straightforward to outright give them data on human phase lords?"

"That requires a human phase lord to volunteer private and sensitive information. Would you like to volunteer, sir?"

"..."

Chapter 6974: In His Image

At first, Ves did not want to hand over his medical data on his physical state.

Many people could figure out a lot of uncomfortable insights depending on the level of detail and completeness of the physiological data.

Nobody wanted to expose themselves to other people so readily. People could abuse this data in all kinds of nefarious ways, from devising viruses that specifically targeted his physique to creating a very convincing clone that could fake his identity.

Yet as Ves thought about this situation a little more, his mind started to drift.

What would happen if his Woodsap mechs were made in his image?

This would be far more than a simple vanity project.

It would have greater significance, especially now that red humanity had entered the Age of Dawn!

Ves began to imagine a future where the Terrans deployed the Arboreal Project biomechs in great numbers.

Although the configurations of the biomech design had not been finalized yet, that did not stop him from imagining the organic machines assaulting the native aliens with a combination of ranged and melee armaments.

The weapon loadouts were not too important. What truly made the Arboreal Project special aside from its Woodsap System was the amazing properties of TE Wood.

This alien biomaterial enabled the organic machines that were made by it to evade detection until they entered visual range.

Even after they had been detected, enemy sensors and targeting systems would still experience trouble with trying to lock onto their targets due to the interference produced by wood impregnated with Solus Gas.

As the Arboreal Project mechs inevitably incurred damage from their adversaries, the machines could quickly regenerate and patch up holes in their wooden exteriors while still remaining in the field.

The Emperor Tree once demonstrated excellent regenerative properties, and the mechs made by an enhanced version of the same Ebony Wood would also be able to do the same.

In fact, according to the original plan, the Arboreal Project might also be able to absorb TE Wood from other biomechs to conduct emergency repairs and restore a significant measure of their combat effectiveness!

A more advanced application of this capability was to enable the Arboreal Project biomechs to absorb debris and other materials in the field. Perhaps their quality and other properties may be substandard, but they could still be used to produce inferior varieties of wood that were suitable to conduct makeshift repairs. Regardless of whether the Arboreal Project gained all of these amazing features, enemies would struggle to kill the biomechs if they failed to strike these wooden machines with overwhelming attacks.

Just like the Everchanger, the Arboreal Project might not appear too tough and resilient on the surface, but so long as they remained functional on the battlefield, they could continue to regenerate their damaged and broken parts so long as they had access to enough energy and materials.

This not only enabled the Arboreal Project to sustain their presence on the battlefield considerably more than other first-class mechs, but also made it difficult to weaken a unit comprised of these biomechs by whittling down their numbers.

Unlike most other mech units that steadily grew weaker and less threatening after losing their machines for one reason or another, the mech units based on the Arboreal Project woud be able to preserve their numbers much longer!

The importance of this could not be overstated. It took far longer and much greater effort for the enemy to degrade the combat effectiveness of a Terran biomech unit.

By relying on their ridiculous regeneration and self-repair capabilities, the Arboreal Project biomechs would be able to keep going while keeping their numbers up for a far longer period.

This meant that it was not only more difficult to outnumber them, but the Woodsap mechs would also have a far greater chance of gaining an escalating numbers advantage as the battle continued to unfold.

Unlike many other mechs that grew weaker and more exhausted as the battle dragged on, the Woodsap mechs should remain vigorous and healthy as the initial phases of the fighting had passed.

These biomechs excelled at attrition warfare!

So long as they retained enough TE Wood and did not completely deplete their energy reserves, they became effectively unkillable and unremovable.

They would remain stubborn and were as difficult to remove as cockroaches.

"This is not the extent of their remarkable nature."

The Terrans also planned to forge a deep connection between the Arboreal Project and Gaia.

Ever since Ves first granted life to Gaia, she had never served as a proper design spirit for a living biomech.

That was mostly his fault as he remained very reluctant to turn any biomech into a living mech.

Now that he had decided to do this, Gaia finally had an opportunity to demonstrate her usefulness when tied to a biomech and more precisely a wooden mech.

Ves expected this relationship to produce strong synergies, possibly surpassing the benefits attained by typical bonds between living mechs and design spirits.

The Terrans had actually taken charge on this matter. Many of them already worshiped Gaia and could call upon her power to produce extraordinary outcomes. They definitely had a big ploy in mind for the Arboreal Project.

Ves was glad to let them work their magic. He hadn't really done anything too remarkable with design spirits as of late. This was a waste as the Age of Dawn opened up many more opportunities for spiritual entities to intervene in the material realm.

Hopefully, the Terrans would succeed in surprising him. Their long heritage enabled them to preserve a lot of legacies. Ves never underestimated the methods that these proud but cautious people hid up their sleeves.

All of these promised features already elevated the first Woodsap mech design beyond any normal limitations, but Ves still did not think it was enough.

His Elemental Carmine mech designs were supposed to be the works that exemplified his design philosophy and granted his customers powerful new ways to become a lot stronger.

They were supposed to be epochal inventions that redefined the mech industry once they became available and set a new standard that every other serious competitor had to match.

His Carmine mechs had already created an opening that Ves could take advantage of, but they were not enough as far he was concerned.

The Yellow Jacket models only targeted norms. The main goal of this innovative mech line was to grant ordinary people the chance to pilot a real mech. Ves specifically made the Yellow Jacket line as affordable as possible in order to increase its reach to the greatest possible extent.

It clearly succeeded in this goal.

The Elemental Carmine mech concept was not meant to be a direct follow-up to the Yellow Jacket line.

Instead, Ves explicitly targeted them towards existing mech pilots, though he also expected his next work to gain the interest of well-funded and highly enthusiastic norms.

The point was that the Arboreal Project was meant to occupy a very different position in the mech market.

This was a Carmine mech that was squarely aimed towards Terran mech pilots that sought a machine that could bring them to the next level in more ways than one.

The complexity of the Arboreal Project should at least match that of an existing firstclass multipurpose mech like the Omega Thresher model.

While this demand normally made the Woodsap mech so demanding to pilot that only potentates with A and B-grade genetic aptitudes could keep up with all of the

variables, the Woodsap System should do wonders in enabling less talented mech pilots to control the expanded features of the Arboreal Project.

This was also one of the reasons why he had been caught off-guard by the latest initiative from the Terrans.

Letting norms 'pilot' the Arboreal Project as if it was their own bodies did not really align with Ves' original goals for his first Woodsap mech.

While Ves was willing to believe that the elite infantry soldiers tapped by the Terran Alliance would be able to familiarize themselves with their complex new Woodsap mechs a lot faster than usual, that did not change the fact that they were norms.

These norms lacked a lot of basic knowledge and common sense about mech piloting, especially in relation to first-class multipurpose mechs.

Their combat effectiveness when piloting the Arboreal Project would be poor at first. Even if they could already control the biomech frames almost as effectively as they controlled their own human bodies, the new Woodsap mech pilots would only be able to make good use of external armaments.

They could still rely on the existing skills they possessed with rifles, swords and other handheld weapons to fight with the Arboreal Project mechs.

Perhaps they could also rely on their existing expertise to operate additional weapon systems such as shoulder-mounted rocket launchers.

However, the story would become a lot more complicated if the Arboreal Project ended up being loaded with a dozen different weapon systems and half-a-dozen other special modules.

The new Woodsap mech pilots could not rely on any existing muscle memory or prior training to operate these integrated systems with the same degree of proficiency as proper mech pilots.

First-class mech pilots at least possessed a foundation to effectively employ these integrated systems.

What about norms that had formed a Woodsap Pact with the Arboreal Project mechs?

Unless the Terran Alliance was willing to hold them back for a time and put them through a condensed training course, the only other way to solve this problem was to simplify the mech design.

"Are the Terrans planning to design multiple variants, or will they make it modular instead?" Ves wondered.

He needed to have a good discussion with Master Laila Devos in order to find out the answer.

Regardless of what the Terrans had in mind, Ves refused to compromise on his original idea.

The Arboreal Project was primarily meant to enable existing mech pilots that yearned for more.

It was due to this priority that Ves actually thought about letting the Terrans take inspiration from his phase lord physique.

What could be more symbolic than a mech designer developing a biomech that was made in his own image?

Although Ves could not deduce all of the consequences of this design choice, he had a strong hunch that the effects would be significant!

He could already think of several ways to take advantage of this connection.

Perhaps he would be able to form a secret kinship network between himself and all of the Woodsap mechs. They could act like his eyes and ears and enable him to keep track of what the Terran forces were doing. Maybe he could descend upon a specific Woodsap mech and control it as if it was his own surrogate body.

Perhaps he could even force the Arboreal Project mechs to acknowledge him as their progenitor and force them into following his orders!

Of course, these were all momentary fantasies.

As a mech designer, Ves shouldn't be too greedy for power. He needed to think of how he could benefit his customers instead.

Ves believed that if the Arboreal Project mechs were made with his phase lord physique as a reference, it was not impossible for them to take after their creator.

Was it possible for biomechs to transcend into phase lords?

The fact that Ves could not immediately rule out this possibility meant that there was a chance that it could happen!

This alone was an immense development!

It would definitely give the Terrans a much more powerful weapon to fend off the native aliens!

As long as they could channel enough phasewater into the Woodsap mechs, there was a possibility that the Terrans could foster an entire mech army of 'phase biomechs' or whatever!

Ves could scarcely imagine how powerful they could become.

By combining the advantages of both biomechs and phase lords in a single package, Ves would definitely be able to ensure that his Arboreal Project would earn an unforgettable place in the history of mechs!

Chapter 6975: Phase Biomech Concept

Just as Ves' imagination continued to run away with the fantasy of creating the Arboreal Project in his image, he suddenly recalled that phase lord body cultivation was not safe!

He almost overlooked this massive problem!

It would be very bad if the 'phase biomechs' that emerged from Arboreal Project biomechs eventually developed a separate consciousness and went rogue!

Phase lord body cultivation absolutely could not be trusted. As long as it remained under the influence of the heavenly authority of the Red Ocean, every phase lord was always in danger of getting compromised.

However... Ves remembered that the hidden danger only emerged from his true body after it surpassed the length of a typical mech by 3.5 times.

No matter whether this threshold was absolute or relative, his hypothetical phase biomechs may be able to avoid this threat so long as they did not grow past an unknown size.

As for where that threshold may be? The best way to find out was to conduct an experiment.

The threat of rogue phase lords was still very real, but there was a big difference between humans or war machines going out of control!

The former was absolutely unacceptable. Humans had to remain in control of their own minds and bodies at all times.

If external parties managed to subvert humans, then this could shake the very foundation of human civilization!

The existence of the Cosmopolitan Movement already inflicted massive damage to red humanity's efforts to remain alive and free in a hostile dwarf galaxy.

If not only human phase lords, but phase biomechs started to get compromised in large numbers, then that may very well spell the end of red humanity!

Ves knew that he was definitely playing with fire just for contemplating this idea.

Yet he could not let go of it. If humans found it necessary to leverage the power of phase lord body cultivation, then let them do so through their organic mechs rather than their own bodies.

This would satisfy multiple demands at once.

First, humans were able to acquire more champion units. Even if phase lord body cultivation was costly and wasteful in terms of phasewater, it was still a viable option if better alternatives were not available.

These days, the best way for human forces to acquire a lot of phasewater was to kill a phase lord and extract all of the phasewater that could be salvaged from the carcass.

This was not an impossible task for the Terrans.

The body of a typical lesser phase lord already satisfied the immediate needs of at least one human phase lord.

The corpse of a greater phase lord yielded exponentially greater amounts of phasewater!

The only other requirement to securing all of these precious materials was to win the battle and take control of the battlefield.

It took a lot of time and specialized hardware to efficiently harvest large quantities of phasewater.

Therefore, it was still possible for the Terrans to harvest just enough phasewater to cultivate a large army of phase biomechs.

Ves just had to supply the right organic mech that possessed the qualifications to turn into phase lords.

While it was highly uncertain whether it was even possible for wood-based organisms to turn into phase lords, Ves felt it was still an idea worth exploring!

The probability of success could definitely be raised if the Arboreal Project designs were based on his own true body.

By developing these mechs in his image, Ves wanted his works to inherit his 'talent' in phase lord body cultivation.

There were definitely other factors that determined whether an organism could transform into phase lords.

Ves could not control for all of these variables, and that was okay. If this idea failed to produce the desired result, then he would accept it with grace.

The Arboreal Project should already be able to stand on its own two feet. The possibility of transforming into the biomech version of a phase lord should be considered a bonus feature.

That did not mean that Ves intended to fail.

The more he thought about this idea, the more he became attracted by the game changing nature of harnessing the power of a phase lord under safer and more controlled circumstances.

A Woodsap mech may be permanently bonded with a human mech pilot, but so long as they had yet to merge in totality, there were still ways to isolate them from each other.

If the former got corrupted, the latter still had a chance to avoid the same fate.

In fact, the Woodsap mech pilot may be able to utilize his own human qualities to launch a counterattack and help his Woodsap mech regain its original personality!

Even if the rogue biomech could not be recovered, then the Terrans could always lock it up or get rid of it just to be safe.

It would be a shame to deprive the Woodsap mech pilot from his bonded machine, but at least he still retained his integrity as a human.

As Ves continued to consider the many consequences of successfully giving his Carmine biomech the ability to gain the powers as well as the stature of a phase lord, he could not hold in his ideas any longer.

He needed to share them with a mech designer and hear whether it was a proposal worth pursuing.

He needed to talk to a mech designer he trusted and preferably over a secure channel.

"Vector Loban?"

Ves immediately shook his head. The Arboreal Project was a collaboration between the Larkinson Clan and the Devos Ancient Clan. It was inappropriate to share important details and deliberations with a member of the Red Association.

Besides, Ves was pretty certain the Transhumanist Faction rejected this approach.

Granting greater autonomy to a mech had always been taboo to the mechers, but giving it the power of a phase lord on top of that would spark fears that Ves may accidentally invent a weapon that could turn against red humanity!

"Maria Abselon?"

She could be trusted more or less, but the problem was that after she had completed the eventful implantation surgery, she had already made her way back to the expeditionary fleet. The Larkinson Biotech Institute was still centered around the Dragon's Den. The second-class capital ship increasingly showed her age, but many of the biotech researchers had grown comfortable working on this ship. Her many biomes continued to give the scientists access to a large number of diverse research subjects.

Since it was difficult to talk to Maria in a secure setting, Ves went over a few other names.

"Gloriana?"

Absolutely not. She wouldn't understand.

"Ketis?" Same problem with Maria.

"Alexa. Yes. It has to be her. She will understand."

Ves called over his direct disciple to his private design lab right away.

Though the young lady tried her best not to look annoyed at being made to interrupt her current assignment just so that she could attend to his needs, she nonetheless presented herself to Ves with impeccable decorum.

"You requested my presence, sir?"

"Yes. I need to hear your input on a radical proposal related to the Arboreal Project. You should be aware of what the Devosans and I have been trying to do, right?"

"I have a broad understanding of this advanced project." She confirmed. "The Arboreal Project is your first proper attempt at designing an Elemental Carmine mech based on the wood element."

"Then you should hear about the latest ideas I have come up with that can take this mech design project to the next level."

He proceeded to explain his thought process, not holding many details back. He trusted Alexa and valued her opinions, so it was better to share as much of his opinions as possible, even the ones that could land him in trouble if heard by the wrong parties.

Alexa frowned deeper and deeper as Ves expounded on his latest proposal. It was clear that she did not agree with everything she heard.

"So what do you think, Alexa?" He asked after he finished his lengthy explanation.

"There are many points of criticism that you have not properly considered in your rush to realize your latest proposal of yours." She said in a calm and composed voice. "From what I have heard so far, you are in that specific mood where you have already committed to your idea. I doubt I can persuade you to reconsider despite its many faults and risk factors. You are addicted to high risk high reward gambits."

Ves shrugged. "I suppose I am. I do not deny your accusation. I do have to note that it has worked out more often than not. My judgment on these kinds of matters are quite good."

"That may be true, but the consequences of failure are much more severe this time. You will be regarded as a sinner on the same level as the founders of the Cosmopolitan Movement if your 'phase biomechs' ever manage to go rogue and defect to the Red Cabal."

He winced. That was indeed a possible outcome of a crazy attempt to create artificial phase lords.

"I will not evade responsibility if my work ever goes out of control. As a mech designer, I have at least that much integrity. That said, I strongly believe in my proposal. I am willing to risk everything in order to raise the potential of the Arboreal Project. It is one of the five Elemental Carmine mechs that will form the basis of my future progression as a mech designer. I will not settle for anything less, especially with the knowledge that designing more innovative and groundbreaking works increases one's potential as a Master Mech Designer."

This was a powerful reason why Ves wanted to make a big bet. He did not want to remain cautious and disregard opportunities that could increase his chances of becoming a Star Designer in the future.

Alexa Streon took in his words and remained silent for a dozen seconds.

"Understood. Since you are committed to your proposal, let me make a few suggestions. First, is it not more appropriate to reserve the possibility of enabling a Carmine mech to evolve as a phase lord to a Carmine mech based on the water element?"

"Not necessarily." Ves shook his head. "I do not disagree with your logic, but I have already come up with the Mergewater mech concept. This is an Elemental Carmine mech that seeks to devour the strength of exobeasts and may ultimately become one in its own right. Since this is the case, I think it is worth a shot to see whether turning a wooden mech into a phase lord can be done."

Alexa simply accepted this response and presented her next word of advice.

"My second suggestion is to think about designing a basic variant that lacks the possibility of evolving into a 'phase biomech' and a more advanced variant that does carry this possibility. I believe you should give the Terrans the choice on whether they want to become involved in this insanity. Let your more risk averse clients make use of the basic variant which will likely be cheaper and less prone to complications. Those that are desperate for power can always choose to make a gamble by fielding the advanced variant of your Woodsap mech."

Ves blinked. Alexa had just introduced a dose of common sense that had been sorely lacking in his proposal. He should have come up with it himself.

"Noted. I will include it in my new plan and wait for the Terrans to share their feedback. It may push back the completion of the mech design project, but it can't be helped. All of us have to do a lot of extra work in order to complete two related mech designs at the same time."

As far as Ves was concerned, the advanced variant should be the true result of the Arboreal Project.

The basic variant would probably end up as a dumbed down version that lost several risky features in order to raise its stability.

Chapter 6976: Valid Precautions
Ever since Alexa Streon came around, Ves gained an excellent sounding board for his ideas.

Alexa had acquired a certain foundation into living mechs. She was also a competent first-class mech designer raised and educated in the finest traditions of the Terran superstate.

This granted her a strong theoretical foundation in mech design. She not only learned a lot of high-end knowledge, but was also good at utilizing what she knew.

All of these factors made it so that Alexa was not only able to understand most of what Ves tried to accomplish with his work, but could also provide feedback from angles that he had not even considered.

In short, Ves could always expect to receive useful feedback after discussing his ideas with her. She was not afraid to share honest criticism, but also possessed enough tact to let him stick to his stubborn ideas whenever he was set on his course.

She was much more pleasant to talk to than Gloriana, that was for certain.

"Normally, an experiment that comes with such enormous risk factors should never be rushed." Alexa continued to share her opinion about the latest proposal to the Arboreal Project. "We know too little about the mental influence of phase lord cultivation. We do not know whether a wooden mech is more or less resistant to it, or whether a Woodsap mech pilot can still effectively control a machine that has undergone such a transformation. All of this should ordinarily be investigated as part of an expansive multi-year or decade-long research project."

Ves crossed his arms as he leaned back on his chair.

The young Journeyman clearly thought that Ves was being way too reckless and tried to persuade him to slow down.

Failing that, Alexa at least wanted Ves to implement additional precautions.

Her emphasis on prudence and redundancies were sound, but Ves could not afford to let them weigh down his project too much.

"I don't have time for all of this crap, and I don't think the Terrans who I am collaborating with have much patience either." He said with a sigh. "It is impossible to follow standard scientific procedure. We need to complete our work on the move. This means that we have to compress all of that work that normally takes more than a decade into less than a year."

Alexa sighed. "I understand. I do not necessarily agree, but I understand the importance of delivering a working product in time. Your latest proposal does not make that easier. You are attempting to increase the complexity of the Arboreal Project when it is of vital importance that it releases as soon as possible. How do you intend to deal with this contradiction?"

"I don't know if I am being honest." Ves shrugged. "I will just proceed with my new plan and hope that it will progress faster than I anticipated. I am not ignorant of how my additional requirements increase the burden to the project, but I am more motivated than ever to complete it. Hopefully, the same goes for my Terran collaborators. In the best case scenario, we may end up completing our project ahead of schedule."

"That is wishful thinking, sir."

"I know, but a mech designer can dream, right?"

Alexa didn't know whether she should further admonish her mentor. "Assuming that the Devos Ancient Clan agrees with your insane but promising proposal, I suggest you implement additional precautions to limit the potential damage if anything goes awry. One of the most obvious ones is to implement a kill switch."

That immediately caused Ves to drop his smile. "You should be well aware of the controversial nature of what you just said."

He previously thought that Alexa was kind of cute. Her concerns made her more endearing. This made it easier for him to disagree with her without generating any animosity.

However, Ves feared that this may no longer be the case.

He was no stranger to kill switches. He implemented plenty of them in his prototype mechs.

Mech designers could justify the use of kill switches in those instances. Who knew whether a prototype would suddenly glitch out and crash into a wall or overheat to the point of melting.

In case the mech pilot could not resolve these problems from the cockpit, outside intervention became necessary.

Nobody understood a prototype mech better than the mech designer, so it made sense for him to be able to command a mech to forcibly shut itself down at any time.

Implementing a kill switch into a finished product was a different story. Even if he insisted on calling the Arboreal Project mechs experimental, that did not change the reality that he was willing to let thousands if not tens of thousands of people make use of his new works.

Alexa did not change her stance, though.

"I know, sir, but this is not a normal case. You should not blindly apply old rules to a new and deviating circumstance. Think about it. The mechs that people use today can always be depended upon. Even your living mechs which can think for themselves have proven to be unflinchingly loyal and sympathetic towards their mech pilots. A kill switch is unwarranted in most cases as the problem never lies with the mech, but rather the person that is piloting it. The MTA and the RA's stance towards this has always been clear. If you do not trust a mech pilot with the power of a mech, then you should not allow the former to control the latter."

This was part of the age-old 'mechs don't kill people, people kill people' debate.

Many minds held different opinions on what was supposed to be the case, but the mechers had always maintained the unified stance that mechs were always innocent.

If a mech ever became a hazard to innocents and the people it was supposed to protect, then either it was too flawed to be allowed to put into the field, or it was not piloted by the right individual.

It was the job of the owner of the mech to make sure its design was sound and that it was being controlled by an honest and competent mech pilot.

The mechers deliberately pushed this viewpoint in order to reduce the public's tendency to blame mechs themselves for any problems.

It should also depress the demand for kill switches to the lowest possible extent.

Yet now that Ves thought about what he tried to propose for the Arboreal Project, he had to admit that the old concord no longer applied.

This was one of the rare legitimate cases where the biomech itself had become a possible threat in its own right.

So long as it became a phase lord in biomech terms, it could always spawn an adversarial consciousness and defect from the Terrans.

This was an unacceptable outcome!

Ves actually realized that it was much more acceptable to deal with the stigma of implementing a kill switch than to give the biomachine any chance of siding with the native aliens!

He looked at Alexa with a different expression. "I was wrong. This is an excellent suggestion. I am not sure whether a measure as extreme as this is necessary, but... I can see how we will eventually install kill switches into any Arboreal Project mech that has the potential to turn into a phase biomech. Harnessing a powerful organic machine that can always be shut down after receiving an external signal is the price that the mech pilot has to pay to wield transcendent power."

"The basic variant can be spared of this measure." Alexa added. "Since it has no chance of transforming into a phase biomech, there is no grounds for implementing a kill switch. This should satisfy most Carmine mech pilots who do not have any extravagant demands for their Woodsap mechs."

The basic version and the advanced version would therefore diverge even more from each other.

If this continued, then they would eventually become two substantially different mech designs.

"I think that the kill switch is a good idea for more than one reason." Ves said as he thought about it further. "In my case, Sev knows that if he ever gains control over my true body and acts out, the First Sword Mark III will come down on him like a hammer and force him to behave. In the case of the Arboreal Project, a kill switch can be used as a means of coercion. If a phase biomech has ever gone rogue, you don't need to flick the switch right away. You can threaten to do so in order to force the out-of-control organic machine to comply."

Alexa thought about this scenario. "That sounds plausible, but only if the kill switch remains reliable. This cannot be guaranteed when the whole biomech undergoes a profound and mysterious multidimensional transformation. The kill switch must be integrated into the core of the biomech to the point it cannot be removed without setting it off. In addition to that, it must be programmed to automatically explode when it has not received a routine signal in several days. This will require a great deal of clever and robust bioengineering."

"Good suggestions. The Terrans are proud of their biotechnology, so I think they will be able to manage. I think that this may be a good way for the Terrans to ensure they remain in control over their phase biomechs. So long as their growth and evolution has not advanced too far, the operation of the kill switch can be guaranteed. This way, even if they gain a rebellious mindset, their power can still be harnessed against our enemies."

What Ves left unspoken was that the kill switch may not be so reliable anymore after the phase biomech had grown too much.

The true body of a phase lord became increasingly tougher, harder and more multidimensional as it grew.

While Ves was not too well versed in the science of phase lords, he understood through his own body that his vulnerability to many threats had dropped to a minimum after he grew so much.

For example, if infantry weapons used to pose a legitimate threat to him in the past, then he was now immune to their firepower!

Even mechs could no longer squash him with a single attack anymore!

What about kill switches? Even if the Terrans were clever enough to implement a solution that grew in scale and remained proportional to the size of the phase biomech, the complex growth process of a phase lord may still be able to negate this threat one way or another.

Therefore, it was best if the phase biomechs were restricted from growing further.

"You have been extremely helpful so far, Alexa. Do you have any more helpful suggestions?"

The woman thought for a moment. "Not any that you are willing to accept. Your proposals show great promise, but I fear that this may be a case where you will end up paying for your overconfidence. It is your prerogative to decide whether you want to commit to your reckless plan. One more recommendation I have for you is to try and find a way to strengthen the design spirit's control over the Arboreal Project mechs.

Ves' eyes lit up after hearing this suggestion. "That is another great idea! If the phase biomechs ever go rogue and manage to escape the fate of becoming disabled due to the activation of a kill switch, then we will still need a means to track it down. Gaia can help us with this. So long as the bond remains as unbreakable as a Blood Pact, the rogue biomachine can never escape pursuit!"

This should serve as an additional reason why it was a bad idea for a rebelling biomech to obediently remain subservient to their Terran masters.

Ves suddenly winced.

Talk like this had a way of backfiring.

If he truly believed that living mechs deserved to be treated with the same respect as humans, then implementing these coercive measures may go against his principles as a mech designer.

It also did not escape his awareness of how a kill switch and other safety measures could also be applied to human phase lords such as himself!

Chapter 6977: Wonder Weapons

Was resorting to kill switches the right solution?

No.

Was there a better choice available?

Not really.

Kill switches therefore became the least-bad solution out of a long list of other awful choices.

Leaving it out was no solution. So was reducing the scope of the Arboreal Project.

Ves could not accept timidity from himself.

When anyone became a Senior Mech Designer, he or she became aware that they were effectively auditioning to become a Master Mech Designer.

This meant that if a Senior wanted to make progress, they could not rest on their laurels and be content with mechs that they could already design with a bit of effort.

They needed to look beyond their existing reach and embark on more ambitious projects that were much closer to the work undertaken by Master Mech Designers.

Even if most of the results ended up falling short, the gains were still considerable.

Not only did the Senior Mech Designer cultivate the right attitude towards mech design at a higher level, but he also accumulated a lot of scattered data that was relevant to his design philosophy. Who knew whether the mech designer could combine these results together and achieve a breakthrough?

Seniors who did not possess the courage to tackle greater challenges and fail usually failed to move forward.

Of course, just because they were willing to invest their time on big projects did not necessarily mean they were guaranteed to succeed.

An ambitious research project may end up eating a disproportionate amount of time and resources that could have been better spent on other pursuits.

If a Senior continued to hit his head against the wall without much to show for it, then he would eventually see his lifespan running out while failing to reach critical mass.

Therefore, one of the most important criteria that separated successful Seniors from failing ones was judgment.

Were they overreaching? Did it make sense for them to pursue a difficult objective? Were they neglecting their other commitments?

Senior Mech Designers needed to be able to navigate many difficult choices that could drastically change the course of their lives and careers.

Ves now felt that he had reached such a junction. His decision on how to approach the Arboreal Project could mean the difference between success and failure.

Whether he was overreaching by wildly expanding the scope of this mech design project remained unclear at this point.

However, Ves felt he had to prove his courage and determination by making a bold thrust in a project that possessed a lot of significance for his design philosophy.

Ves did not forget what his work was all about. Mutual Growth in Adversity. The new proposal that he had drafted and perfected with the help of Alexa exemplified this ideal.

He could already see his inner flame being stoked. No matter how difficult it was to realize this radical new idea, he felt it was more than worth it to do his best to turn it into a reality!

After he thanked Alexa for her advice and dismissed her from his design lab, he spent an hour writing up a detailed and structured proposal. He laid out his chains of logic and his speculations in a way that made this endeavor sound promising enough to explore.

While success was anything but guaranteed, the chance to mass produce artificial phase lords and mobilize them against the native aliens could be a gamechanger for the Terran Alliance and red humanity as a whole!

Once he became satisfied with his report, he encrypted it with Terran cyphers before transmitting it to Master Laila Rebecca Devos.

This was not the most secure means of data transmission at his disposal, but it was adequate enough for his purposes.

It took a few hours for the woman to respond to it by calling him directly.

The old Master Mech Designer did not waste any time.

"Ves. Your... creative suggestions have generated a considerable amount of interest... and controversy among the mech designers and researchers that are currently involved in the Arboreal Project. The promises contained within your proposal represent a significant paradigm shift in how we can wage war, but the added complexities and sharp increase in risk factors are highly detrimental. At best, the completion of the project will experience a delay of at least several months. At worst, the overreach in trying to explore how to turn a wooden mech into a phase lord may cause our progress to hit a bottleneck that cannot be overcome in several years."

Ves did not show any overt sign of doubt and hesitation. Even if he harbored his own misgivings, he could not afford to show a lack of confidence in his own ideas.

"I cannot predict how likely it is for us to produce a successful result. I admit that my proposal will turn the Arboreal Project from a somewhat reliable source of

reinforcements into a fantastical if somewhat impractical wonder weapon. However, don't you think that this is exactly what the Terran Alliance needs?"

"What do you think our colonial superstate needs?" Master Laila Devos shot back a question herself.

"The problem has never been the regular armed forces of our enemies, Master. They may outnumber us, but humans are the masters at war. It is their champions and more precisely their phase leaders that truly give us so much grief. Our ace pilots and ace mechs may be individually superior, but they are still outnumbered. The ability to deploy dozens if not hundreds of 'phase biomechs' can hold the enemy phase lords back."

Master Laila did not look entirely convinced.

"It is completely unknown whether it is possible to transform even a single Woodsap mech into a phase biomech. Even if we are being optimistic and assume that we can raise a hundred of them in a relatively short time frame, this will not change the fact that they are physically smaller, devoid of powerful phasewater organs and lacking in their mastery over spatial manipulation. It is doubtful whether 10 of them can hold back a single greater phase lord."

Ves smirked. "If 10 isn't enough, then deploy 20. If 20 isn't enough, then deploy 40." Ves said. "Before you tell me that the cost in phasewater is astronomical, you just need to tell one of your peak ace pilots to hunt down a single greater phase lord. As long as the carcass is mostly still intact, it should yield more than enough phasewater to meet the needs of this initiative. The point is that we are not going to play by the enemy's rules. Don't forget that we are working with biomechs. If they are lacking in phasewater organs, we can make up for it by stuffing their expanded mech frames with lots of up-scaled weapons and modules. They have practically turned into juggernauts!"

"Then why should we not design juggernauts directly?" Master Laila Devos played devil's advocate.

That was a good question.

"You know as well as I do that juggernauts and phase lords are two very different kinds of existences." Ves said. "Juggernauts have a much lower threshold, but the

absence of a multidimensional frame makes them much more vulnerable against damage. They cannot fight against a phase lord on an equal basis unless they are clad with superdimensional armor plating. The phase biomechs that I have envisioned for our project are much different. They not only retain the high regeneration factor of TE Wood, but can also resist at least an order of magnitude more firepower due to dimensional shenanigans. Oh, and we also can't forget about the spatial barrier."

"Which shouldn't be too strong if the phase biomechs have only just transformed into artificial phase lords." She responded.

The spatial barrier was the strongest defensive measure of a phase leader.

Although a phase lord only gained a truly resilient spatial barrier with the integration of a Kelsis organ, its absence did not leave a phase lord completely defenses.

Besides, the phase biomech could rely on an up-scaled azure shield generator instead.

"Nothing is stopping you from developing phasewater organs for the Arboreal Project." Ves pointed out. "I think it is a worthwhile endeavor to dedicate a considerable amount of manpower and resources into this. If you can obtain the research results from the Phase Lord Department of the Red Collective, then that is great. If not, you can still produce a batch of standardized low-end phasewater organs that are specifically designed for our phase biomechs."

"We have been considering this course of action, but it is too premature to make this decision. We should first see whether your ambitious proposal to our collaborative effort can deliver on its promises. That is what is currently under discussion."

"Then what is the holdup?" Ves asked.

"As I have mentioned in the beginning, opinions are split." She said. "There are enough leaders among us who do not have a rosy outlook on your suggestions. They argue that it is better to invest into a safer, modest but more realistic outcome. Then there are people who argue that obsessing over incremental changes when the Caesarion Upper Zone is under heavy attack is folly. They believe it is better to invest in multiple radical projects that have a better chance of upending the war. Even if the expanded Arboreal Project has failed to deliver the most hopeful results, there is still a chance that one of our many other controversial projects can succeed." In other words, even if the Terrans agreed with his proposal, they would not bet everything on a single throw of the dice.

It was safer and much more sensible to make dozens of bets at a time. The cost may be ruinous, but the chance of producing at least one successful wonder weapon rose sharply!

However, the cost to the Terran Alliance was massive. A lot of existing research projects may be forced to shed valuable manpower and funding as they are being diverted to much more ambitious but wasteful endeavors.

This would most definitely cause the Terran scientific community to fall behind compared to the other major powers.

Ves still considered this to be a worthwhile risk, though. If the Terrans failed, then their precious colonial superstate was bound to collapse and lose the majority of its territories.

By that time, maintaining a technological lead over other human groups was not important anymore!

The Terrans most definitely understood this as well. The fact that Master Laila Devos mentioned this already signified that the Terrans were already preparing to enact desperate measures.

What Ves needed to do was to convince the Terrans that his proposal was promising enough to be added to the list of wonder weapon projects.

Only by getting on this exclusive list would the Arboreal Project be able to benefit from the greater might of the Terran scientific community!

The involvement of brilliant biotech researchers and so on would give their project a massive boost.

The Devos Ancient Clan may have to cede a lot of ground to the other Terrans because of this, but it was still worth it so long as the results were impressive enough!

"Do I need to do anything?" Ves simply asked.

Master Laila Devos looked at Ves for several seconds before she inclined her head.

"A Star Designer has been put in charge of deciding which projects merit greater support from our science and development infrastructure." The older woman eventually revealed. "If you are sincerely convinced that your proposal can not only succeed, but change the Terran Alliance for the better, then I can schedule a virtual meeting between you and the Grand Mander. Her Excellency may not specialize in biotechnology, but her core specialization is based on regenerating metal and repair systems, much of which is based on biological processes. She is most certainly knowledgeable enough to evaluate the viability and success rate of your proposal."

Ves looked surprised.

The Grand Mender!

Ves did not expect to get into contact with another Star Designer so soon!

This was a great opportunity! Even if the Grand Mender ended up rejecting his proposal, it was still worth it just to hold a serious discussion with one of the hundred humans that had reached the pinnacle of the mech designer profession!

"Please do so." Ves eagerly gave his assent. "I would love to present my case to an esteemed Star Designer."

Chapter 6978: Olikon Middle Zone

When Ves learned that his proposed changes to the Arboreal Project had elevated its priority to the point where it came under the consideration of the Grand Mender, he became both nervous and ecstatic.

He did not have any unrealistic fantasies about the famous Terran Star Designer rolling up her sleeves and working to solve the many problems associated with the ambitious project.

The Arboreal Project was one of Ves' most important mech design projects. It played a vital role in the progression of his design philosophy.

Despite its heavy reliance on Terran biotechnology, the key elements that made the mech design project so innovative and unique still had to be based on his own contributions.

The direct intervention of a Star Designer may end up doing the project a lot of good, but to the detriment of Ves.

After all, if the Grand Mender utilized her vast knowledge and design capabilities to solve many different problems, then where would that leave Ves?

Aside from being able to contribute to the Woodsap System, Ves could not imagine that he would be able to offer any solutions that the Star Designer already could not solve by herself.

Having her take over a project that was supposed to belong to him would cause it to develop in a different direction, one that was dictated by the much more powerful mech designer as opposed to himself.

Even if the Star Designer was mindful of her disproportionate impact and tried to keep her involvement to a minimum, everyone would still look up to her for leadership.

This was in their nature. No one would look for Ves anymore. The presence of a Star Designer would instantly cause Ves to be reduced to a mere contributor to his own mech design project.

This was why Ves did not react entirely positively to the intervention of the Grand Mender.

If she was tactful enough to give Ves enough space to realize his own vision, then that would be best.

A Star Designer shouldn't stoop so low that she felt the need to steal his thunder.

Of course, the premise of this was that Ves could deliver on his promises. If he was able to complete his work by relying on his own efforts, then there was no need for a Star Designer to waste her time.

If the Arboreal Project ever began to stall, then that might cause the Terrans to turn to a higher authority.

If the Grand Mender found the project to be important enough for the Terran Alliance's strategic interests, then she may choose to intervene despite how much damage it would do to Ves' personal interests.

That would be a devastating outcome to Ves. Even if the Arboreal Project ended up successful due to the timely assistance from a Star Designer, he would no longer possess a strong sense of ownership towards the outcome.

Ves rubbed his face.

"Since I have decided to bet big, I have to make sure I can win."

Alexa was right about his inclinations. He loved to engage in high risk high reward ventures.

Still, the reality was that most of the risky projects that he embarked upon in the past were not as unlikely to succeed as they appeared on the surface.

Ves could usually rely on external consultants or a useful infusion of knowledge from the System to bail him out and overcome difficult bottlenecks.

While there were definitely times where he relied on his own ingenuity to solve a difficult problem, he did not deny that there were occasions where he resorted to expedient means.

Could he rely on that again in the Arboreal Project?

Ves was not too sure. What he wanted to do clearly went beyond what anything red humanity and the native aliens had ever done.

Red humanity was still new to the phase lord phenomena.

The Red Collective possessed the largest amount of expertise on the human side, but Ves had received so many warning signals about the increasingly more perplexing Phase Lord Department that he did not even bother approaching it for help.

As for the native aliens, the transformation of a mortal being into a phase lord was a sacred process. Every phase lord was a god to the aliens. A process that sought to transform biomechs into artificial phase lords was nothing less than sacrilege to the superstitious aliens!

Therefore, neither side held all of the answers. Ves could not rely on stealing someone else's homework in order to realize his ambitious proposal. He needed to engage in original research and find a way to combine the strengths of both human and alien methods in a brand new package!

"This is not going to be easy... but that is just about right." Ves grinned.

Knowing that his project might receive attention from the highest level of the mech industry invigorated him even further.

He did not want to disappoint a Star Designer. If he wanted to make his Arboreal Project bigger, then he should definitely do so as best as possible.

Ves proceeded to spend time on fleshing out his proposal further. He revised his original draft design for the Arboreal Project and duplicated it to serve as the basis of an advanced variant.

Nobody ever came up with the concept of a phase biomech as far as he could tell. This meant that he had to persuade a large number of skeptical and doubtful Terrans that it was not only possible, but that it was also worth it to realize such an extravagant creation.

Ves therefore decided to call upon Vulcan's extensive comprehension of art and craftsmanship to visualize several possible forms that this phase biomech could take.

He started off with a vague image of himself before cladding with organic armor plating. The distinctive texture of TE Wood made the sketch look like the concept art of a fantasy drama, so Ves quickly tried to make it look like an actual mech by adding several integrated and handheld weapon systems.

Once he was done with that, he began to reproduce several versions of it but at different scales.

The initial one retained the proportions of a typical mech.

The next one was three times taller.

The one after that grew to the size of a medium-sized juggernaut!

Although the three draft designs still looked awfully similar to each other, when they were placed next to a generic first-class multipurpose mech, their visual impact became completely different!

The largest version of the biomech was supposed to represent the machine in its full phase lord glory.

In fact, Ves still remained doubtful whether a height of several hundred meters was able to represent the full height of a phase biomech, but he decided to be conservative in his estimates.

Besides, the chosen height already looked dramatic enough.

The phase biomech possessed the scale of a juggernaut, but could also fold in on itself until it has reached the standard proportions of a first-class mech.

This was an important advantage!

It made the phase biomechs a lot more compact when it was not in use. The Terrans would not have to use large and sluggish starships to transport any large and cumbersome war machines.

They could just use a fast and convenient combat carrier to instantly drop several dozen devastating artificial phase lords in a location of their choosing!

As Ves continued to touch up on the draft designs of the larger and more impressive versions of the phase biomechs, a shipwide alarm suddenly interrupted him from his current preoccupation.

The voice of the Saint Commander spread across the Premier Fleet.

[We have identified, selected and scouted our first target. We will be making our way over to the anti-spinward side of the Olikon Middle Zone. To be more specific, we are heading to a port system that has grown to become one of the central staging points of alien raids into the Caesarion Upper Zone. A combination of visual scouting, divination and information transmitted by surviving human guerilla forces confirm the presence of large depots and repair facilities. We also have tentative confirmation that the star system is playing host to at least 3 greater phase lords, with a larger quantity of lesser phase lords hailing from different fleets.]

At least 3 greater phase lords!

A typical junior ace pilot struggled to kill one, let alone push such a monstrous opponent back.

However, the First Sword Mark III could not be measured by this old standard. As one of the first superdimensional ace mechs, the new machine possessed a full anti-phase lord configuration.

Even if Saint Dise was not able to defeat all of those phase lords with such a massive hardware advantage, she should at least be able to retreat unhindered!

Of course, there were far more enemies to worry about. Ves had participated in the design of the First Sword Mark III, so he knew quite well that it was not very good at

eliminating large swarms of regular combat units, especially at ranges that fell outside of the operating distance of her sword fey.

Endurance was one of the First Sword Mark III's greatest shortcomings. She could fight hard, but did not possess the staying power to maintain an active presence on a large battlefield.

This upcoming battle also served as a test for the Minerva Mark II and her empowered mechs.

Everyone had high expectations for the Command Field that the Saint Commander could deploy without restrictions with her new machine.

However, even if Ves added in the units of the Bluejay Fleet, it still sounded like a challenge to overcome all of the enemy forces stationed in the occupied star system.

After Casella Ingvar made her announcement, the Premier Fleet and the Bluejay Fleet changed course and ventured straight into the Olikon Middle Zone.

The speed of the two fleets was so fast that they could potentially enter into battle as soon as three days!

Of course, that was assuming that Casella wanted to take the native aliens by surprise.

If the Saint Commander wanted to strike with speed, then the enemy would not have much time to prepare.

Perhaps their divided command structure would cause the native aliens to spend more time arguing against each other than form a cohesive and united response.

If the Larkinsons struck the enemy during this transition period, they could take advantage of the confusion of the native aliens and defeat a lot of units with much less resistance than normal! However, if Casella made the wrong judgment and threw her forces right into a prepared and fully organized line of defense, then it would become much harder for the Larkinsons to defeat the aliens and complete their mission goals.

"Interesting."

Ves had a decent enough understanding of the Saint Commander.

He believed that she should have enough confidence in the strength of the new and improved First Sword and Minerva to opt for speed rather than caution.

The latter may enable her forces to avoid a possible trap or ambush, but it would also cause them to waste a lot of time and miss valuable opportunities.

This was the last thing the Premier Fleet needed!

Many of the Larkinsons who joined the Premier Branch had high hopes for their military venture.

They did not want to initiate a campaign with lots of momentum, only to end up cowering before their alien foes.

Casella needed to achieve a strong victory against a formidable adversary in order to start their campaign on a strong footing!

The morale boost from a convincing victory would be massive!

"This is going to be exciting." He grinned.

Ves soon thought about how he could take part in this battle.

It was not in his nature to be reduced to an observer during a battle like his wife.

If it was before, then Ves could still rely on his authority and leadership to issue orders and intervene whenever he wanted.

Now that he was about to resign from his position as a patriarch, he feared that the Larkinsons would no longer allow him to mess around like he owned the place.

That caused him to frown.

"I need to find a different way to get involved. There is no way I am sitting this battle out like I am an ordinary civilian!"

Chapter 6979: New Sword Tricks

Shortly after the Saint Commander's announcement, the Larkinsons serving on the Tortuous Scream looked visibly more nervous and excited.

They all understood that they had not picked an easy first target. Yet they all believed that the Saint Commander would lead them to victory.

Of course, not everyone reacted to the news with enthusiasm.

Many of the mech designers of the Design Department did not look forward to remaining stuck on a warship that was certain to play an active role in the upcoming operation.

Perhaps they could transfer to a different starship, but that was not that much of an improvement.

The Tarrasque and the Babylon Excavator were faster and more technologically advanced vessels belonging to the Red Association and the Red Fleet respectively.

However, there were merely cruisers that were considerably smaller and weaker than a genuine capital ship.

Perhaps these advanced human warships possessed superior mobility and escape capabilities, but if the native aliens managed to catch up to them, their defenses likely wouldn't last that long.

The Vulcan's Glory was a decent alternative. Unfortunately, the dwarves like to build their starships slow and sturdy. The recently built fleet carrier benefited from plenty of advanced human tech, but much of it was geared towards making her more resistant against damage.

Transferring to the Vulcan's Glory therefore did not represent much of an improvement. The only advantage of staying on this vessel was that she would likely be stationed in the rear of the battlefield.

The same could not be said for the Tortuous Scream.

She was an orven battleship.

In order to make effective use of her formidable collection of primary gun batteries as well as her 155 artillery bunkers, she needed to occupy a more forward position so that she could effectively pummel the enemy with the help of her empowered bunker mechs.

Ves knew that Casella and the other senior military officers of the two fleets had entered into strategy sessions.

He tactfully declined to attend them. There was little point in participating in them as his expertise in this field was nothing impressive. He would only embarrass himself if he rashly tried to impose his own views on the upcoming operation.

Attacking a native alien stronghold was no joke.

This was especially the case when it likely played host to multiple fleets that were strong enough to engage in commerce raiding in the periphery of the Caesarion Upper Zone. The caliber of enemies was considerably stronger compared to the less wellequipped enemies assigned to attack the Middle Zones.

This meant that the margin of error was not as generous as before. Mistakes could lead to much more devastating consequences. The more superior alien warships and starfighters could easily shred mech units that had been caught out of position. Much relied on the two ace pilots. The Saint Commander was supposed to be the answer to the vast disparity in numbers. Saint Dise was meant to be a killer weapon against all of the alien phase lords that the Larkinsons and their allies expected to encounter.

If anything went wrong with the two ace pilots or their ace mechs, the two fleets immediately fell into a crisis!

Everyone was aware of this fact. They all hoped that Casella and Dise knew their business and that they had spent enough time with their new machines to be able to use them to good effect in the coming battle.

Ves grew curious whether Saint Dise had gained enough proficiency in the usage of her sword fey to be able to utilize them effectively in the upcoming operation.

He decided to call her up in case she needed assistance. As the main developer of her sword fey, he may be able to offer helpful advice.

"I have spent the last weeks doing little else but practice with my sword fey." Dise said over the comm. "I have learned the formal methods and techniques used by drone mech specialists, but I find that some of them are not too useful in my case. The sword fey that you have are all alive and intelligent. They can move where I want them to be by themselves. Instead of relying on traditional control methods, I have decided to give them more freedom and autonomy. Not only am I willing to let them decide their own movements, I am also experimenting with letting them decide which targets to attack."

That was a surprising answer.

"I thought that you would choose the opposite." Ves said with a hint of perplexity in his voice. "You are one of the high-ranking mech pilots that prizes skill, precision and control. It is not typical for you to surrender control over an essential aspect of your ace mech. Those sword fey are all superdimensional. If they ever turn their blades on the wrong targets, the consequences will be devastating."

The ace swordsman mech pilot looked completely unconcerned. She pinned Ves with a knowing glance.

"Somehow, I think that you would prefer my current arrangement. You granted life and autonomy to these sword fey for good reasons. It would not have made much sense to grant them the ability to act autonomously only to limit them to obeying my absolute instructions. Doing so is contrary to their existence and a waste of their potential. Do you not agree?"

Ves adopted a complex expression. "What you say is correct, but it is not the complete story. I envisioned this outcome to be the end of a long journey. I expected you to learn how to control the sword fey as if they were ordinary spurs at first. After several months or years of using them according to your intentions, you slowly begin to give the fey more autonomy, not because you think that controlling them is a burden, but because they have learned so much of your style and techniques that they can execute parts of it on an independent basis. Eventually, they have become so good that they can fight alongside you as if they are loyal Swordmaidens."

Saint Dise smiled. "That is a thoughtful approach, but I think it is unnecessary. When it comes down to it, the sword fey are just companion spirits of the First Sword, am I correct?"

"That is... an accurate enough statement."

"Then I am actually cooperating with multiple copies of the First Sword. That makes this so much easier. The sword fey already understands my habits, my sword style, my combat philosophy and my target priority. What they do not know is how to fight as sword fey, and it just so happens that I do not have much expertise either. We are both learning this as we go. We have barely scratched the surface of sword formations. This is much more complicated than I thought. It greatly helps if my living mech helps me figure them out. I cannot simply will them into existence. I have to pay attention to math, geometry and all sorts of mystical rules."

In other words, harnessing the power of sword formation required the use of brainpower, and not a small amount of it. This presented an interesting challenge to an ace pilot who never had a strong need to leverage her intelligence in previous battles.

First-class mech pilots needed to be proficient in math in order to properly wield all of the advanced guns mounted on their mechs. They also needed to be proficient in numbers when utilizing the more advanced auxiliary systems related to sensor systems, remote shield generators, field repair systems and more. Of course, these mech pilots usually did not perform all of the calculations in their head. They just needed to understand the math and theory just enough to be able to direct the mech to perform the number crunching. They also had to be knowledgeable enough to understand what the figures actually meant.

Dise was far removed from a data-driven mech pilot. She started off as a third-class mech pilot who operated beyond the Komodo Star Sector.

Back then, Lydia's Swordmaidens did not just specialize in piloting swordsman mechs because they looked cool, but because they were among the simplest mechs that basic third-class mech pilots could learn under a challenging training environment.

All of this meant that Dise actually possessed a rather poor inclination towards more complicated mechs and features.

There were good reasons why Dise and many other Swordmaidens preferred to stick to piloting 'simple' swordsman mechs that lacked the bloat that was typical of more advanced second-class and first-class mechs.

Ves and Ketis already took this tendency into account when they designed the First Sword Mark III.

As much as Dise was comfortable with wielding a single blade as her only weapon for the rest of her fighting career, it was actually detrimental to her development to become so fixated and overdependent on wielding a single greatsword.

Perhaps she may still be able to make great accomplishments while continuing to wield a single blade, but there was a large risk that she would hit an impossible bottleneck that she could not overcome because she lacked the ability to think outside of her very small and narrow box.

By branching out into controlling sword fey and giving her the option to play with sword formations, Saint Dise already became confronted with a lot of novelty.

She lost her comfort zone and was forced to go back to being an unskilled beginner again.

The ace pilot had to learn a lot of basic lessons and explore the vast possibilities made available by the sword fey on an incremental basis.

That was the brilliance of the sword fey. There was so much depth and mystery behind them that Saint Dise would never be able to master their usage anytime soon. She would have to spend decades if not centuries of her life in trying to utilize the sword fey at their greater potential.

So what if Dise had to learn a lot of math and other new skills?

As an ace pilot, her learning ability was not weak!

Even if she was not as predisposed to purely intellectual pursuits like a formation master or a mech designer, she was still very capable of mastering the basics with the help of a mind that had surpassed the human limit.

When Ves took a careful look at the ace pilot's expression, he could spot a sense of wonder and interest.

That was a good sign.

"Have you managed to figure out a useful sword formation?" He asked.

"I have managed to come up with a number of tricks." The ace pilot confirmed. "It is easy enough to form rudimentary sword formations with just three or so sword fey, but the demands are much greater if you try to incorporate more. It was a challenge for me to learn how to form a larger sword formation, but I think I have managed. I have a strong interest in testing them out on the battlefield. It may not end so well if I try them out against a phase lord, but it should still do excellent damage against ordinary opponents."

"What if they do not work out as well as you hoped?"

"Then I will stop my experiments and fall back on using simpler sword formations." She replied. "I am not fussy about this. I have only recently begun to pilot the First Sword Mark III. I do not expect to master it instantly. That would be a disappointment because that means that both my mech and myself have exhausted our potential." It was good that she recognized this truth. Only by continuing to make meaningful progress would she be able to increase her qualifications to become a god pilot.

Ves suddenly thought about a request that he intended to make.

"By the way, if my guess about the upcoming battle plan is correct, your First Sword Mark III will be launching straight to the enemy with the help of the gravitic catapult of the Vulcan's Glory, am I correct?"

Dise raised her eyebrow. "That insertion idea is being considered. I cannot say whether it is certain that this is how I will launch into the field."

"It's pretty much certain in my opinion. After all, the gravitic catapult is new. We just can't resist the urge to give it a try."

"Why did you bring this up, Ves?"

"If you can, please do me a favor. I would like you to carry a piece of special cargo with you as your First Sword Mark III arrives at the enemy's doorstep..."

Chapter 6980: Superdimensional Crafting

The Premier Fleet and the Bluejay Fleet arrived at the targeted star system in the blink of an eye.

The two fleets had made their way over to the Screed Tanner System at their best sustainable pace.

The Saint Commander — with the agreement of High Captain Gilbert de Raanvanchas of the Tortuous Scream and Rear Admiral Gori Tensen of the Bluejay Fleet — chose to believe in the collected intelligence and race to Screed Tanner in order to catch the native aliens off-guard.

Even after they had translated to the edge of the star system, the arriving warships and carriers quickly engaged their warp drives and sought to head over to the sixth planet from the local star.

Screed Tanner VI-F used to be the capital moon of the port system of a now-fallen second-rate state that operated within the protective sphere of the Terran Alliance.

The original pioneers who settled into the Olikon Middle Zone and occupied the surrounding regions believed that their forward position compared to the rest of human space would bring them a notable amount of prosperity over the ensuing decades.

Located adjacent to the Caesarion Upper Zone, the second-class colonists who emigrated to the Olikon Middle Zone expected to generate a good amount of income from selling raw materials to the first-raters and serving as a vital conduit of trade due to its favorable positioning.

The Great Severing and the blazing hot Red War had smashed all of those dreams into pieces.

Upon the collapse of the 5 defensive bands, many of the second-rate states failed to put up sufficient resistance against the invading assault fleets.

Although it was rather admirable that the human defenders managed to preserve at least a part of the Olikon Middle Zone, that did not give the others a lot of consolation.

The native aliens had already plundered and razed the majority of human settlements in the middle zone.

The ones that remained were too small to rank high in priority. The native aliens would get around to demolishing them sooner or later.

One interesting phenomenon that emerged on a large scale was the rise of resistance movements.

Many humans that ended up getting stuck on the planets lost to the invading aliens did not try to go out with a bang.

After all, even if they possessed enough courage to go out with the enemy, they might not have access to mechs such as the Final Glory to inflict meaningful damage to the subsequent occupation forces. A lot of other humans simply prized their lives and the lives of their families and tried to flee to safety wherever possible.

A minority of them could still board shuttles and rudimentary spacecraft that could allow them to escape the gravity well of their planet and hide out in the vast star system.

So long as they picked a good planet, moon or asteroid to build a hideout, they may be able to survive for years if not decades without giving away their presence.

Of course, there was no question that they no longer posed a significant threat to the alien occupiers, but they could still make themselves useful in other ways.

Most of them engaged in long-range observation and signal analysis. They tracked the movement of alien starships and tried to pass on that information to the Terrans.

Those that had chosen to remain behind on the planet did more than just collect information.

They attempted to sabotage and hinder the alien operations whenever possible.

While there was no way for them to blend in with the very obvious alien soldiers and support personnel that had built bases and supply depots on the surface of occupied planets, they could still rely on stealth gear and familiarity of the terrain to engage in guerilla warfare.

Their efforts probably did not result in too much slowdown. Even if they managed to blow up a repair facility or assassinate key alien engineers, the enemy war machine was simply too vast to become affected by this minor interference.

From what Ves was able to gather from the intelligence reports of Screed Tanner VI-F, the terraformed rock hosted a lively guerilla movement, but the native aliens had quickly expanded their base on the surface of the moon, making it more and more difficult to undermine.

The native aliens also deployed more ground troops to patrol the perimeter and even attempt to track down the hidden boltholes of the human guerillas.

The enemy grunts must be having a miserable time by playing cat and mouse with the remnants that refused to roll over and die.

Their higher ups likely did not really care about the impact of the local human resistance movement.

The moon would get cleaned up sooner or later.

Perhaps the native aliens intended to terraform the globe sometime in the future in order to make it more habitable for the next species to arrive and occupy the star system.

Ves was not sure whether the Saint Commander aspired to save these guerillas from extermination.

It would be impossible to evacuate the majority of survivors if the two fleets failed to crush the native aliens to the point of slaughtering or driving away their phasefighters and warships.

Now that he thought about it, these guerillas may make for great Larkinsons. It would be worthwhile to recruit them due to surviving so much hardship and still possessing the courage to fight back.

Of course, the Larkinson Clan should only offer them invitations if it was possible to evacuate them in the first place.

If the Larkinsons only managed to bloody the native aliens without defeating them entirely, then it would be difficult to bring them away.

As the mood among most of the Larkinsons in the Premier Fleet rose to a crescendo, Ves spent what little time he had left on finalizing his own preparations for the upcoming operation. This was why he was currently in his private workshop putting together a small but surprisingly resilient piece of hardware.

Vulcan had descended on Ves' body and helped to enhance the craftsmanship of their latest weapon.

Their work was much more challenging than usual because much of the structure of their latest work consisted of hull-grade superdimensional alloy.

Although the alloying process had made it more stable at the cost of reducing its durability, the material was still exceptionally difficult to shape and machine.

Relying on normal tools was folly, so Ves had taken the time to craft a basic set of superdimensional hand tools. He also had to install superdimensional parts in a handful of production machines.

Handling superdimensional tools was not as easy as ordinary ones. Their superdimensional nature caused them to cut into normal materials far too easily.

However, when these superdimensional tools came into contact with superdimensional materials, they did not always behave as straightforward as they appeared on the surface.

Ves and Vulcan found it necessary to think and visualize their work beyond the 3 material dimensions. They had to shape matter that existed in dimensions that could not be seen through normal eyes.

Normal people would probably get stumped at this point. They could not even conceive of the concept of cutting into materials in strange and weird dimensions.

Even the scientists and engineers that had studied the fundamentals of superdimensional technology still struggled to grapple with the inability for the human perspective to cope with this complication.

They had to rely on new and sophisticated lab and workshop machines to do the work on their behalf. Ves actually possessed an advantage in this sphere. Unlike most people, he happened to be a phase lord, so his awareness and cognition had expanded in a vague and indescribable sense.

While he was not able to directly observe what was taking place in dimensions beyond the material ones, his lesser Locos organ was able to reach into it and make sense of it more or less.

No wonder the Locos organ was part of the basic 3 phasewater organs that every phase leader had to start with first. The absence of superdimensional and gravitic senses would leave them blind to the conditions of their own multidimensional physiology.

In any case, the Locos organ enabled Ves to work a lot of stuff out by hand and figure out the true state of all of the parts.

If he did not have such a convenient organ at his disposal, he would have been forced to request the Red Association to loan him its cutting-edge superdimensional production equipment.

Ves knew they existed because the mechers had given Ketis access to the newly developed superdimensional machines to complete the most recent upgrade of the First Sword.

As he and Vulcan continued to learn plenty of lessons on how to shape superdimensional alloy, they rapidly figured out a few knacks and made fewer mistakes.

This was important because they had to produce a masterwork.

Their weapon wouldn't work if it was just a regular piece of craftsmanship.

"Alexa."

"On it, sir."

He had called upon his direct disciple to assist him in his current work. He and Vulcan needed to maintain as much focus on their craftsmanship as possible.

Alexa diligently supplied Ves with materials and took away the finished parts until they were ready for assembly.

She also kept track of time, inspected the conditions of the tools and machines, kept away any nosy people and occasionally voiced her own opinions.

In exchange, she gained an excellent view of her mentor's personal approach towards craftsmanship. As an observant mech designer, she learned plenty of lessons just by watching him work.

"It is time to assemble all of the parts."

This was delicate work, but it was much easier than producing all of the small parts.

Slowly but surely, a metallic cat came into being.

This mechanical avatar possessed a strong superdimensional skeletal frame and internal structure that was able to resist virtually any infantry-grade attacks.

Ves loaded up with plenty of miniaturized components. Each of them comprised essential systems responsible for movement, detection and technology interfacing.

As Ves continued to put together his latest mechanical avatar, it became obvious that he had designed it with a combination of combat as well as infiltration in mind.

The gunmetal gray cat body made the mechanical avatar look a bit too conspicuous, but Ves eventually fixed that by wrapping it up in a shell made of transphasic hyper alloy that was impregnated with Solus Gas.

Although this meant that the outer-most layer was much less resistant against damage, its was nearly undetectable by most electronic detection methods!

That was not all. The exterior armor plating was actually part of an active stealth system.

The mechanical cat avatar could hide itself from sight!

When combined with the properties of Solus Gas, Ves believed that it had become practically impossible to detect its presence when it was trying its best to hide!

Although Ves was not arrogant enough to assume the native aliens had no chance of detecting it, his latest cat avatar should be able to remain safe so long as the enemy was not actively trying to search for infiltrators.

Ves paid special attention to the tail of the mechanical cat avatar.

He had integrated a small transphasic hyper luminar crystal weapon at the end of the tail.

It was a bit tricky to design and install the miniature parts and still keep the tail flexible enough.

Ves relished in the challenge and felt satisfied when he had managed to realize his idea for this miniature weapon.

He did not expect it to inflict too much damage.

While it was incredibly powerful for its size, it was still smaller than a handheld pistol. Ves had installed the most simple fire beam attack phase crystal, which meant that it could only launch transphasic fire hyper beams.

This was enough firepower to instantly kill most generic infantry targets, but it was quite underpowered when used against vehicles or larger hardware.

If Ves wanted to inflict greater damage, then he did not intend to rely on this pitiful small luminar crystal weapon, but instead on a much more primitive weapon!

"Bring me the fangs and claws."

Alexa carefully brought over a lockbox that contained a set of small-scale superdimensional things that were nonetheless far more dangerous than they appeared!

This was because Ves hade made them all out of weapon-grade superdimensional matter!