

Mech 4161

Chapter 4161 Cormaunt Hempkamp

Merrill O'Brian's breakthrough and rise to prominence within the Design Department certainly made a lot of assistant mech designers prouder and more hopeful.

If someone like her was able to make the transition from assistant designer to lead designer, then the members of the design teams could make the same leap!

Unfortunately, not a single mech designer among the thousand or so assistants that remained had made any breakthroughs after Merrill.

The timid Apprentices did not display any exceptional moments of brilliance nor developed any fantastic solo mech designs for the Emergent Boutique.

Though the new sub-brand of the LMC definitely proved its worth by motivating the assistants and helping both Miles Tovar and Merrill O'Brian seize their opportunities, Ves had a feeling that this measure had already reaped the low-hanging fruit.

In other words, even without the Emergent Boutique, Miles and Merrill were already close to breaking through.

Perhaps it would have taken a few years longer for them to make it to their current rank, but they were already set up to succeed.

"These other mech designers on the other hand..."

Whenever Ves entered the main design labs of the Genesis Lab, he developed the habit of sweeping his spiritual senses through the different halls.

The vast majority of mech designers under his employ were still as ordinary and mediocre as before. Even the ones that had caught his eye a long time

ago such as Catherine Evenson, Moltar Ringer and Rina Orion still looked as if they had years to go until they were eligible to form their own design seeds.

"A pity."

The lackluster rate of upwards mobility emphasized the brutal reality of the mech industry.

It was rare for Apprentices to be able to break through to Journeyman. Spiritual potential was an essential requirement, but that was far from enough. They needed to be smart, ambitious, persistent, creative and brilliant all at once.

It might not be difficult for an ordinary mech designer to meet one of these criteria, but they needed to be much greater in order to be qualified to become a high-ranking mech designer!

"It's much like how only a small proportion of mech pilots are actually worthy to become expert pilots."

If Ves wanted to increase the rate of breakthrough in his own clan, then he needed to be a lot more discerning about the people he recruited.

Ideally, he would be able to hire the mech designers that ticked all of the aforementioned boxes.

What actually happened was that larger, wealthier, stronger and more prestigious groups snapped up these high potential mech designers first!

Other parties weren't stupid. Even if they weren't able to discern the spiritual potential of other mech designers, they could still study the academic accomplishments, work experiences and other parameters of the young talents.

No matter whether they could ultimately advance to Journeyman or not, it was always worth it to poach these bright and hardworking mech designers!

"Well, if we can't expand the amount of Journeymen in our clan through internal promotion, then we will just have to work harder to recruit them from the job market!"

To be honest, Ves did not really like to resort to this option. Compared to mech designers such as Miles and Merrill, foreign mech designers such as the Voiken Siblings and the Power Pair had no love or attachment to the Larkinson Clan prior to their recruitment.

Though Ves and the clan had tried their best to welcome and integrate the new Journeymen in the clan, it was not the same if they had already been indoctrinated when they were Apprentices which made them much more impressionable.

Ves especially grew more concerned if his clan hired a large number of foreign Journeymen at once.

It would become a lot harder to monitor and integrate all of the newcomers, especially when they were working with many other Journeymen that had yet to integrate into the clan.

This was why he told Gloriana to focus on quality rather than quantity in her efforts to headhunt suitable Journeymen.

"Don't worry, Ves. That is what I have already been doing from the beginning." His wife reassured him. "I have no appetite to work alongside boors and jokers. I am carefully sifting through the applications and I have tasked several headhunting companies to provide me with any tips on new and useful prospects. I will only engage the potential recruits when I am certain they will be of use to us in the Design Department."

Gloriana's insistence on holding on to her strict criteria understandably caused her progress to be slow.

It took months since the start of her search before she was finally certain enough about her choice to present the prospect that she had her eye upon to Ves!

"I almost forgot about this." Ves told her as he skimmed through the record of the Journeyman Mech Designer that Gloriana had found after a painstakingly long search. "However, from what I am able to read, you truly picked a worthwhile recruitment prospect. I never expected you to find an actual neural interface specialist. How did you manage to get a hold of this guy?"

His wife smirked. "It took a lot of effort to find him and persuade him to give our Larkinson Clan a chance. Cormaunt Hempkamp is not an average mech designer, as you can see from the information that the Black Cats have uncovered of the man. Though he has a few blemishes in his career, that does not detract from his willingness to push the boundaries and excel in his chosen specialty."

"That is certainly obvious from the intelligence gathered from him. Normally, a strong desire to innovate and experiment is seen as a boon in our profession."

As Ves gazed at Mr. Hempkamp's projected face, he had the feeling he was looking as a black-skinned version of himself.

While they both possessed the hunger to go off the beaten track and explore new technologies, the problem with Cormaunt Hempkamp was that neural interfaces were not exactly the safest technology to tinker with! A single mistake could easily cause a mech pilot to suffer permanent brain damage!

Though Mr. Hempkamp did not appear to have made any fatal errors, his eagerness to 'improvise' had landed him in hot water multiple times.

The fact that he got kicked out of three separate large professional mech companies was telling!

This was also the reason why Mr. Hempkamp was still available in the job market despite the huge demand for neural interface specialists.

Although there was nothing wrong with using the stock neural interface designs that the MTA freely made available, the best mechs nonetheless had to find advantages in as many aspects as possible. Optimizing the neural interface could often make a small but crucial difference in the operation of a well-designed mech.

Neural interface specialists also played a special role in the design of high-ranking mechs.

Standardized neural interfaces were no longer sufficient to allow expert pilots to properly interface with their expert mechs. They needed to employ more high-end models that allowed for much greater data throughput while also bringing in a lot of additional functions that enabled expert pilots to activate functions that were too complicated for standard mechs.

In the previous design projects that the Larkinsons worked on, they always contracted the design work on a custom neural interface to an external consultant.

While that certainly got the job done, the problem was that the external specialist could only do so much when working remotely.

Ves had long desired to bring a neural interface specialist under his wing. This way, he could specify more detailed requirements and obtain more specialized neural interface designs that worked far better with specific living mech models.

This was why he decided to interview Mr. Hempkamp in spite of his problematic past.

Both Ves and Gloriana had already taken their seats when their guest arrived.

"Meow." Lucky called as he scrutinized the newcomer for a time before dismissing the fellow as a threat.

"Patriarch Larkinson. Madame Wodin-Larkinson. Thank you for seeing me. I have looked forward to this meeting ever since I arrived in Davute."

Gloriana managed to find Cormaunt Hempkamp when he was still residing in another star system and zone. It took quite a bit of time and effort to transport him all the way to Davute.

The journey didn't seem to have tired out the prospective recruit. In fact, he was brimming with eagerness as he finally managed to attend this important meeting!

Ves gestured to the nearby chair. "Please take a seat. Let us start with your past... employment history. I think it is best if we clear the air straight away. What got you fired from three different large and professional mech companies in a row? Don't tell me that they were all awful companies run by bad leaders."

Despite putting Mr. Hempkamp on the spot, the mech designer wearing a formal suit did not look stressed at all. He already expected to be grilled given his colorful record.

"I enjoyed working for my past employers." The neural interface specialist honestly replied. "I still wish I wasn't let go by them. In every case, I worked alongside friendly colleagues who possessed similar interests in mech design. It's just..."

"Did you feel as if your bosses underutilized your abilities?" Ves asked in a knowing tone.

"That is right! That is exactly right! In each and every company that I worked for, I applied to spend additional time and resources to develop a new and original idea that could substantially increase the performance of the neural

interfaces of the design projects that I worked on. While I couldn't guarantee whether my solutions would produce measurable results, I think it was still worthwhile enough to make the attempts."

When Mr. Hempkamp spoke, Ves could feel the passion and conviction from the other mech designer's voice and feelings.

It was due to their resemblance that Ves was able to empathize with Mr. Hempkamp so much.

"I take it that your superiors are much more conservative and less willing to experiment than you, is that correct?"

"That is correct, sir. I was not ignorant of that, but it frustrated me a lot to see good opportunities to improve a mech design go by because the lead designers were unwilling to deviate from their set formulas! They were unwilling to entertain my ideas and instinctively rejected most of my suggestions because of their unreasonable fear and ignorance towards neural interfaces. Contrary to their impressions, altering the design of neural interfaces does not instantly turn a mech radioactive. There are many methods to safely test mechs with altered neural interfaces without producing fatalities!"

To be honest, Ves began to feel a bit afraid at Hempkamp's open enthusiasm towards playing around with neural interfaces.

According to all of the lessons that he had learned about neural interfaces, these crucial bridges put mech pilots into a vulnerable position.

When machines suffered glitches and errors, then that wasn't necessarily a big deal. The malfunctioning devices could easily be debugged and repaired in order to turn them as good as new again.

The same was not necessarily the case with humans! When mech pilots suffered the consequences of any faults relating to neural interfaces, they

could suffer 'glitches' that directly damaged their vulnerable brains and nerves!

As much as humanity progressed its medical technology, the brain still remained the most delicate and mysterious organ of the human body!

There were many kinds of damage that modern medical technology was unable to address.

Every instance where people experimented frequently with neural interfaces eventually produced accidents that generated a lot of preventable suffering!

Over time, the MTA strongly implemented a lot more rules and regulations concerning neural interfaces. No longer were neural interface specialists free to experiment recklessly with this key component.

The MTA correctly identified the need for mech pilots to maintain trust in their own mechs!

If mech pilots no longer entrusted mechs with their lives, then the future of the mech community would eventually be in danger.

Ves also had to face this risk. If he brought in someone as eager to experiment as Mr. Hempkamp into the Design Department, would the mech pilots of the Larkinson Army still remain eager to pilot his living mechs?

This was a tough call.

The safest option was to wave Mr. Hempkamp away, but that might cause the Larkinson Clan to miss out on its only opportunity to hire a decent neural interface specialist in the short or medium term!

This was why Ves was contemplating whether he should extend Mr. Hempkamp the benefit of the doubt.

Chapter 4162 Secret Catalogue

"I understand that you did not exactly fit in with the previous companies that you have worked for." Ves said after he heard Cormaunt Hempkamp's perspective on his turbulent employment history. "The companies that tend to require the services of neural interface specialists such as yourself are usually large and established companies that have already built up a way of doing things. These structures usually emphasize stability and regularity because that is how you can best produce constant and consistent output."

The dark-skinned mech designer looked as if Ves hit the nail right on the head!

"That is exactly right, sir!"

Ves possessed a particularly special understanding of Hempkamp's difficult position.

On the one hand, he was a mech designer who had relatively few restraints about pursuing radical innovations and inventions. He regularly disregarded safety rules and confidently gambled on his next implementations, hoping that they would work out great when utilized in practice!

On the other hand, he was also a leader and the person who was ultimately responsible for what the Design Department put out. Every mech design that flowed out of this critical department was bound to be used by different people, whether they were external customers of Larkinson expert pilots.

It was because he wore both of those hats at once that he understood how Mr. Hempkamp and his frustrated former employers must have felt in the past.

A mech designer that was proactive and possessed an innovator's heart was incredibly precious!

However, such a mech designer often turned out to be a time bomb as well!

A mech designer such as Mr. Hempkamp was a high variance professional that could make groundbreaking inventions but at the same time create disasters that could figuratively blow himself and all of the people around him into pieces!

The best case scenario was that Hempkamp would turn into the second coming of Ves, able to revolutionize the entire landscape of neural interfaces after succeeding in his attempt to evolve the tech by a qualitative leap!

The worst case scenario would look similar to what happened to the Supreme Sage.

Ves still remembered how the prestigious former leader of the Life Research Organization no longer became satisfied with ordinary research.

In his quest and obsession to extend his life beyond his already-ancient lifespan as well as gain strength beyond any measure, he created a biojuggernaut called Uranus in order to serve as his next 'body'!

Naturally, the Supreme Sage paid for his hubris with his life, but not before creating a monstrosity that eventually went rogue and unleashed a huge amount of devastation!

When Ves directed an evaluating gaze towards the mech designer before him, he wondered which category Mr. Hempkamp would fall under.

Though Ves felt a natural kinship towards a fellow innovator such as himself, he could not allow his personal biases and preferences override his sound judgment!

If Mr. Hempkamp screwed up in an enormous fashion, then his entire clan would suffer! Hundreds of thousands of Larkinsons might pay the price for the radical mech designer's hubris!

This was why Ves did not dare to accept the man immediately. He needed more information before he could weigh the pros and cons in a rational and logical manner.

"I am aware that it was us that approached you first, but what makes you think you will fit better in our company?" Ves carefully asked as he monitored the other man closely.

Mr. Hempkamp freely smiled. "I have done my research on your clan. Compared to those stuffy old Seniors and Masters who only value their own strengths and expect little to nothing from their subordinates, I think you would be able to appreciate my work more."

"Oh?"

"You're a Journeyman, just like me, so you won't look down on me so much. Your mech company is also young and it does not have the reputation and proven track record of other, more established competitors. That means you need to work harder and bet on a lot more uncommon mech designs because that is the only way you can successfully differentiate your products on the market. The success you have enjoyed shows that you understand this truth and also used this daring strategy to your advantage."

"I see you understand the business side of mech design quite well." Ves smiled. "You are right. As a Journeyman, I don't have the natural advantages that higher-ranking mech designers rely upon to capture market share with greater ease. My work has to be more wonky and unique in order to create a different kind of value that the mech market has not seen before."

"We are the same." Hempkamp hungrily insisted. "While you are undoubtedly the more successful of the two of us, we are both creators who love to design mechs that are different from the molds that already exist. I would be a great fit for your mech company given the more interesting differentiation strategy

that you pursue. Your living mechs have already made your LMC gain a powerful foothold in the Red Ocean. If you add my contributions on top of that, I think that your mech company will be able to sell many more mechs!"

That was a bold statement! Cormaunt Hempkamp certainly wasn't lacking in confidence. For him to predict that his specialty could add so much value to the LMC's products meant that he truly believed in his ideas!

Ves grew more interested in what Mr. Hempkamp sought to accomplish in his mechs.

"Let's talk about your design philosophy. As I understand it, you are a certified neural interface specialist. Despite your... missteps, the MTA has not seen fit to take back your permit. From what I know of the mechers, that probably means they hold a bit of interest in your work and wish to see it develop further."

Hempkamp looked sheepish. "The Mech Trade Association has given me numerous warnings. I feel obliged to disclose that I am not on the Association's good side at the moment."

"That's not an issue to us." Ves dismissively waved his hand. "I am on speaking terms with several MTA Masters, so that more than cancels out your problem. Once you come under our wing, we will be responsible for your work."

"That is great to hear. If you do not have a problem with that, then I believe I can bring much to your clan and mech company. With regards to my specialty, let me give you a brief explanation. Many people in the mech industry make use of neural interfaces without thinking much about it. Is that the case with you as well, sir?"

"Hmmm... now that I think about it, in most ordinary projects I usually shove the most suitable-sounding model inside the cockpit and call it a day. I can't

do anything with neural interfaces because I do not have a permit like you and do not possess enough expertise to know what is safe."

Hempkamp did not look surprised. "That is how most mech designers treat the neural interfaces in their own mech design. To me, that is a great shame and also a major flaw in their approach. Neural interfaces have become so detached from their design choices that these components have turned into the equivalent of black boxes to them. They cannot change anything and do not understand their working at all. The only real choice they can make is choose which boring MTA-designed neural interface they want to slot into their machines."

"And that is wrong?"

"I wouldn't say they are wrong." Hempkamp quickly said in case his earlier statement happened to offend the Larkinsons who had adopted the same approach for a long time. "They only made the decisions that were available to them due to lacking a knowledgeable expert in neural interfaces such as myself. In fact, I have observed a lot of imperfect matching between mech designs and neural interfaces. The descriptions that come with the latter hardly explain their full attributes and nuances. From my perspective, the way that ordinary mech designers select the neural interface models for their mech designs is as clumsy as a child attempting to put together a house."

Ves shared a glance with Gloriana, who looked troubled as well. They did not like being compared to children who didn't know what they were doing.

Still, they were mech designers. They always wanted what was best for their mechs as well as their clients. They possessed a professional obligation to know what they were doing wrong and how they could improve their products.

"So your entry into our Design Department will immediately make that better?" Ves asked.

"I can completely guarantee that your mechs will perform at least 2 percent better than before. I know it does not sound that much, but this is the benefit that I can provide to you when I do nothing else but match the right standard neural interface models to the right mech models. You might not know about it, but the Mech Trade Association has developed countless neural interface models, many of which are subtle variants of each other."

"Oh? I have never encountered that before. Whenever I browse the interface, I only get a limited selection of current models."

Mr. Hempkamp snorted. "That is because the MTA knows that uninitiated mech designers such as yourself cannot understand all of the advanced factors that subtly affect the man-machine connection. The database trims the amount of entries in order to simplify the selection process while also making it more foolproof. It is only when a certified specialist such as myself access this database that it will reveal a much larger catalog. While it is still not as complete as I wish, it contains a lot more subtle variations as well as more interesting models that are slightly less proven."

"Hmmm..."

If this was true, then the Larkinsons were missing out! Even if the improvements were rather small, Ves did not want to let go of any advantage!

As mechs and their designers got better, it became a lot harder to achieve meaningful performance boosts. Ves would have embraced a neural interface specialists like Mr. Hempkamp even if he was only able to boost the performance of Larkinson mechs by just 0.5 percent!

Of course, Hempkamp could provide far more than that. Ves had a feeling that the other man was not satisfied with picking and choosing readily available neural interfaces for every mech.

Ves leaned forward. "What kind of performance boost can you provide if you design specific neural interfaces for our mechs?"

"I can't give you a single universal figure. It is much more complicated than that, sir."

"Give us an approximate range, then."

"Hmmm." Hempkamp fell silent for a few seconds. "Given the quality and performance levels of your commercial mechs, I think I can effectively boost their performance by 4 to 9 percent. I am aware that there is a large difference between the lower boundary and the upper boundary, but there are many variables that affect what I can put together. In my own experiences, I can make a greater difference if the mech is more complex and possesses more systems. There is relatively little I can do for frontline mechs for example."

"I see."

Ves and his fellow Larkinson mech designers developed both simple and complex mechs.

The former generally came in the form of affordable mass production models such as the Pacifier.

The latter generally applied to more expensive mechs aimed at more advanced mech pilots. Outside of expert mechs, examples of this were the Valkyrie Redeemer and the Ferocious Piranha.

"All of this sounds interesting, but I would like to hear a description of what you can do with neural interfaces that the MTA models cannot provide." Ves said. "I want to know more about your design philosophy and how you relate your work to mechs. What are you trying to accomplish? What aspects about mechs do you wish to improve above all else? How do you plan to realize your ambitions?"

This was the most important part of the interview session. Ves needed to know whether Mr. Hempkamp's ideas on mechs were compatible with his own!

Chapter 4163 Parallels

The reason why Cormaunt Hempkamp built up a problematic track record was not only due to his unusual design philosophy, but also the fervor in which he pursued it. His ideas on neural interfaces and how they related to mechs could potentially provide a lot of value, but needed to be utilized in real situations in order to supply him with the data he needed to iterate on his work!

It was this requirement that Mr. Hempkamp fell in trouble so many times. His neural interface designs were considerably less standard than usual and that produced a lot of uncertainty.

The problem with new neural interfaces was that there was no good way to test them without connecting them to a real mech pilot or potentate.

While there were many ways to minimize the risk of harm, the neural interfacing field suffered from a fundamental problem.

There was no substitute for human mech pilots.

This was rather strange as convergent evolution caused a lot of alien races to resemble each other. They evolved similar organs and perform in similar ways when exposed to the same environment because their home planets possessed highly similar attributes.

Yet even if mech designers attempted to trial their new and supposedly improved neural interface designs on these alien races, the results were vastly different!

No matter what, an intelligent alien specimen whose species evolved on a different planet developed a substantially different brain and nervous system.

Since neural interfaces were highly specific towards a specific subset of humans, they simply did not work at all when connected to any alien minds!

After undertaking a lot of trial and error, neural interface specialists eventually concluded that their distinctive works could only be tested on humans or individuals whose genetic makeup was still close to humans.

That latter seemed to give a way out for the mech designers in question. There had been cases in the past where they bred half-alien hybrids that were relatively weird and unusual aside from their brain and nervous system.

As long as the organs that directly connected to the neural interface systems were human enough, then it was still possible to forge a man-machine connection!

While a few of these experiments produced successful results, the MTA shut these experiments down with extreme prejudice once it found out about the macabre research!

It did not take much imagination for Ves to figure out why the MTA and plenty of other people became extremely concerned about these experiments!

After the MTA tightened the rules and implemented a strict regime on neural interface development, it became a lot harder for specialists in this field to trial their new designs.

They needed to take a lot of additional steps, from writing extremely detailed logs to submitting any of their designs to the MTA in order to receive preliminary approval to trial their work on real mech pilots.

Though the Mech Trade Association had a vested interest in speeding up the universal development of mechs as fast as possible, it also had a responsibility to protect the public from unsafe machines.

Since many innovations tended to be dangerous to the user, the MTA ended up in the unenviable position to find a balance between two contradictory goals.

On the whole, the MTA's regime was fairly liberal to general technology. As long as the inventions of mech designers weren't too weird, didn't violate any taboos or happened to be directly derived from alien technology, the mechers generally adopted a tolerant attitude towards new technology.

After all, if the mech industry and tech industry did not possess an atmosphere that actively encouraged engineers and other inventors to realize their promising ideas, there was no way that mechs could catch up to starships in terms of power and practicality!

The huge amount of mech designers that spent their entire lives on improving mechs played a large role in accelerating the progress of this field!

Yet wary of any tech or development that could make the public acquire a sense of distrust towards mechs, it was important to temper this progress with sufficient control and prudence.

It was obvious that neural interfacing technology suffered more than any other technological branch due to how much harm it could inflict on friendly mech pilots!

Since the preservation and development of mech pilots were key priorities to the MTA, the mechers accepted the need to slow down the improvement of neural interfacing in order to keep the pilot class happy.

Cormaunt Hempkamp felt this was a counterproductive development.

"Out of all of the core tech that makes up a mech, neural interfaces have experienced the least amount of improvement from generation to generation." He complained. "This is not a coincidence. The strict rules and the abundant suppression of our work has scared away a lot of promising mech designers

who could have done a lot of good in my field. The MTA's overreactions have also stifled innovation because people like myself get subjected to newer prohibitions because one of my colleagues happened to botch an implementation."

Ves looked intrigued. "If the MTA is so overbearing towards the people that work on neural interfaces, why did you still choose to go into this field?"

Hempkamp helplessly shrugged. "I originally didn't think it would be this bad. I heard the stories and my professors at school gave me numerous warnings, but I thought that the mechers would appreciate or at least tolerate the fresh ideas that I wanted to introduce to the mech industry. To be honest, I also did not set out to revolutionize neural interfacing technology at the start. It was only after I began to learn the true state of my new specialty that I figured out that I could do so much more for mech pilots!"

"And what is that, exactly?"

"Let me turn this conversation around if I may." Hempkamp said as he became more active. "What do neural interfaces mean to you, patriarch?"

"Hmmm. They are a means to an end to me. While they play a vital role in making mechs work, I do not know enough about them to really think about what they do any further. They are black boxes to me that I just put into my mechs so that I can move on to more interesting stuff."

Cormaunt Hempkamp nodded in understanding. "Many mech designers have given similar answers. To me, neural interfaces represent so much more. It starts from the beginning. Even before mechs came to prominence, neural interface technology had already been developed. While the early pioneers of this tech never imagined it would enable the explosive rise of mechs, these researchers and engineers developed the early form of neural interfaces for several different purposes. Some of them are peaceful but even then they

already had a military purpose in mind. Do you know what kind of war weapons they were originally designed for in the past?"

"From what I have read and studied, they were first developed to replace the tactical control systems of old-fashioned aerospace fighters and starfighters." Gloriana answered. "Back when these fighting vehicles still posed a significant threat against the rudimentary warships of humanity, they became increasingly more bloated with features. It became too difficult for pilots to control them. While automation helped with simplifying the control schemes, leaning too much in this direction produced greater problems that negated any improvement."

"You know your history well." Hempkamp said with respect. "Back then, neural interface developers encountered the same problem as we did. The tech was too dangerous or did not work for most pilots. They discovered later on that they were hampered by a factor that we know today as genetic aptitude. That spelled the deathknell to the military usage of this tech. Soon after that, neural interfaces became a lot rarer and they were more often employed on animals and exobeasts than humans."

Ves raised his hand. "Can we speed up this history lesson a bit and come to the point that you are trying to make? As much as I enjoy the origins of this tech, I am a busy man with a lot of design projects on my mind."

"Ah. I apologize, sir. Let me try to summarize my story as much as possible. After neural interfaces no longer became relevant to the military, the biotechnology industry was the only sector where they remained for a long time. Neural interface engineers spent thousands of years iterating on the technology for several purposes. You can generally split these purposes into three broad categories."

"The first category is to connect a human mind to another human mind. This quickly proved to be dangerous, so it was outlawed in quite a few star nations

at the time. That didn't stop certain researchers from experimenting on this anyway."

"The second category is to connect the mind of one beast or exobeast to the mind of another creature. Suffice to say, these experiments yielded extremely inconsistent results. In some cases, beasts became a lot stronger or more versatile. In other cases, they grew extremely violent or outright went crazy. Since there were many star nations that did not enact any laws that granted rights to exobeasts, there were many neural interface engineers that conducted extreme and unrestricted experiments against creatures."

The experiments in question were so gruesome that a small sample of them ended up in the textbooks that every mech design student had to learn.

It was one of the many ways the MTA and the mech community reinforced everyone's fears towards neural interfaces.

No one was allowed to take them lightly! Even the stupidest and most incompetent mech designer knew better than to alter the design of neural interfaces!

"The third category is to connect the minds of humans with the minds of beasts. These produced interesting results to say the least. This is perhaps the research that is most directly related to the neural interfaces that you are familiar with. This was because neural interface engineers successfully adapted these devices so that they could connect humans to machines."

Ves grew impatient. "Why is this relevant?"

"Can't you see, sir? While neural interfaces were only paired with mechs for less than five centuries, thousands of years had gone by while they were used to conduct all kinds of biotechnical applications! Ever since mechs entered the mainstream, neural interface development has split in half. One branch has grown increasingly more specific to mechs, so much so that it has become the

dominant version of neural interface technology. Another branch had faded into the background as it continued to be employed in the biotech industry."

It was at this point that Ves started to connect the dots.

"Wait a minute... are you trying to transpose the neural interfaces used in the biotech industry to the mech industry?!"

Mr. Hempkamp grinned. "You can say that. Mechs and exobeasts have a lot more in common than people think, you see. This is also why I have grown eager to work with you. Out of all of the mechs in existence, the living mechs that you are known for possess additional parallels to exobeasts! They share so many similarities that it has become a lot more viable to borrow tech that is developed exclusively to enable data exchange between two living subjects!"

"That... that's crazy!" Ves gasped. "It's a brilliant idea, I admit, but it can easily go wrong if your assumptions are wrong!"

Gloriana smirked. "Do you see, Ves? I knew that Mr. Hempkamp would be of interest to you. His design philosophy potentially synergizes a lot more with your work than others!"

When it came to their work, Gloriana was always serious. She knowingly extended an invitation to Cormaunt Hempkamp even though his conduct and his attitude offended her sensibilities.

As long as Hempkamp's work and contributions ultimately pushed the Larkinson Clan's living mechs to the next level, then that more than compensated for his eccentricities!

In any case, Gloriana was already accustomed to dealing with Ves' antics. The inclusion of another lunatic hardly sounded like a big deal.

Chapter 4164 Restricted Freedom

In the end, the Larkinson Clan agreed to hire Cormaunt Hempkamp.

Ves had no idea how Gloriana came across this colorful neural interface specialist.

Most people who chose to specialize in this restricted and controversial field self-selected themselves to an extent.

Those that possessed restless hearts and a burning desire to innovate generally specialized in less regulated fields!

Only a lunatic like Cormaunt Hempkamp would think of embracing neural interfaces while holding the same attitude!

Ves truly admired the man for holding this conviction even after getting beaten back multiple times.

However, he also knew that Hempkamp could be an exceedingly dangerous mech designer if left unchecked!

This was why Ves had to think a lot on how to handle such an explosive mech designer in his company.

"We are willing to accept your services if you wish to become a part of our company and our clan." Ves told the mech designer with a smile. "You have made the right choice to settle into the Larkinson Clan. We are a young organization where Journeymen like yourself can explore different ideas and pursue original research without getting bogged down by fossilized structures. That said, while we are rather light on rules, we have our own principles. You will need to abide by them as well as the additional orders that I feel compelled to impose on you in order to temper your experimentations."

Though Cormaunt Hempkamp grew pleased when he heard he no longer had to search for a mech company that would accept a problem case like him, he soon began to frown as Ves mentioned several additional measures.

"Do you subject additional rules and restrictions to every mech designer that joins your clan?"

"No, but then again, none of them have a toxic record like yours. I am not targeting you, Mr. Hempkamp. I am protecting my clan and the people that will pilot our future mechs. Do you recall the mech designer's creed?"

"Mech designers exist to serve mech pilots, not the other way around."

"Exactly. I don't know what impression you have on how we go about our business in our clan, but we always put the interests of our mech pilots in front of every other priority. Your desires, whether they are selfish or noble or both, must always abide by our bottom line."

This did not sit well with the neural interface specialist at all. "That is not exactly what I was expecting, sir. While I am not opposed to additional controls, I still need room to explore my ideas. I will go crazy if I cannot explore any of my ideas. I can do so much to improve your mechs if you let me loose. Trust me when I say that I know how to control myself. I am not as young as before and I have made more than enough mistakes to learn the necessary lessons."

That sounded credible. Not.

Ves understood exactly what kind of person Mr. Hempkamp was like. This was a person who was not only accustomed to bending the rules, he even saw them as a challenge to his work!

Though Ves developed a genuine interest in how his living mechs could synergize with Hempkamp's neural interfaces, that did not mean that he wanted to get implicated by the boundary-pushing mech designer's war crimes!

Ves tried to project as much authority as possible. "Listen to me, Mr. Hempkamp. I founded the Larkinson Clan. I founded the Living Mech

Corporation. Once you get in, you answer to me. I am in charge of the Design Department. When I issue an order, I expect to be obeyed. While I am open to suggestions and tolerant towards different views, at the end of the day our mech design projects must all adhere to a common standard, which is decided by me. Is that clear?"

Hempkamp's expression worsened. He did not react well to authority and Ves' behavior clearly rubbed him the wrong way.

"Look, I am willing to abide by any rules as long as they are well-meant and appropriate for the situation. What I dislike the most are rules that make no sense and orders that are clearly issued in bad faith. I cannot tolerate getting bullied for the fourth time."

"You did not let me finish, Cormaunt." Ves spoke. "I did not approve of your entry into our clan only to cage you in and stifle your options. There is no point in hiring you. I can easily obtain the same benefits by hiring a more conservative neural interface specialist but without getting all of the baggage. The reason why I am willing to give you a chance is because I see promise in your ideas. I just don't think that your approach is the best for us. This is why I want you to work on a special regime."

"What regime do you have in mind, sir?" Hempkamp asked with a suspicious expression.

"Your first instruction is that you must document everything." Ves began. "No matter what you do, you must justify your actions and decisions with detailed and proper documentation. Don't just limit yourself to explaining the choices you have made. Make sure you detail the alternatives you were contemplating and the reasons why you have rejected them in the end. The more complete your data, the more we can follow your train of thought and support your work."

"And what if you do not support the projects that I am proposing?"

"Then that is that. This is also your second instruction. If my wife or I say no to your idea, then I expect you to abide by my intentions. Do not proceed with performing experiments behind our backs. I won't hide the fact that you and everyone else is monitored through multiple means. If we sniff out any impropriety from you, then we will deal with you in a way that you will not find pleasant."

"..."

"Okay, now that we have gotten that necessary stuff out of the way, let me present to you the carrot that we are willing to extend to you. As long as you abide by the two instructions I have mentioned before as well as our standard rules and regulations, I am willing to give you an independent lab where you can develop and explore anything you wish."

"An independent lab? Truly?!"

Hempkamp went from wary to enthusiastic. It was odd to see how the man could swing so rapidly in attitude!

"I am an innovator like you, so I know exactly what you need." Ves explained in a self-assured manner. "From what it sounds like, you ran afoul with your previous employers because they did not value your independent streak and sought to keep you on a short leash. I am not going to do that. I am aware that you need a certain amount of room to operate as you wish. I also understand that you don't work well in an environment where your work and schedule is being micromanaged by an overly controlling supervisor."

"You understand me better than I expected. I am gratified that you are willing to give me an independent lab. That is what I have always dreamt of obtaining. I don't want to be forced to work on tedious design work that anyone with a decent understanding of neural interfaces can do. I want to be

able to engage in my research in an upright manner without getting burdened by too much banal work."

"I still expect you to contribute to some of our ongoing design projects, but I will make sure your workload isn't too heavy." Ves said. "What I expect in return is that you do all of your experiments in a proper fashion in one of the proper research labs that we provide. Do not scurry away to a shady lab or any other dubious venue in order to perform experiments that are way too problematic. Once you are in our clan, you will be a Larkinson. That means that you will partially represent us all to the outside community. I don't want you to do anything dishonorable that will reflect badly on the rest of our clan, do you understand?"

"I think I do, sir, but... how much leeway do I have in that independent lab you are talking about?"

Ves smiled. "I will make sure that your schedule is free enough for you to spend a certain amount of hours in your own lab. Once you enter your sanctum, you are largely free to choose and pursue your own research projects. Now, the amount of hours that you are allowed to spend in your lab is not fixed. It is conditional on your good behavior, excellent performance in our main design projects and so on. If you have been good, you get more hours to spend on your independent research. If you have been naughty, then we will cut the amount of hours that you can spend in your design lab. Do you understand the purpose behind this arrangement?"

Hempkamp briefly frowned. "I think I do. You want to regulate my behavior by pushing the initiative in my lab, if I am guessing this right. I can accept that if that is how you intend to run things. It is nice to possess agency over my own work and allowances for once. If my hours are cut back, then I have no one but myself to blame."

That was exactly right. Previously, Hempkamp did not have any choices at all, so it was easy for him to blame his former bosses for the frustrations he suffered.

Well, he wouldn't be able to resort to this excuse so easily this time! By throwing the ball into Hempkamp's court, he would have to learn and exercise actual responsibility for once!

This was an essential development if Ves wanted to transform Cormaunt Hempkamp from a reckless mech designer into a less reckless mech designer.

Ves had no illusions that he could ever tame a crazy fellow like Hempkamp, but it was already enough to smooth out his rough edges and temper his most extreme impulses to an extent.

"Do I have to abide by any other special rules or arrangements?" The man asked in a tone that hinted that he was already willing to abide by the new regime.

"Yes. I have not forgotten about the fact that it is essential for you to test your neural interfaces on real mech pilots." Ves said as he tried to formulate his words carefully. "Now, I do not condone human experimentation. It is an abhorrent practice that has led to a great amount of unnecessary suffering. However, as barbaric as it may be, I understand that we do not live in a utopian society. Many forms of technology can never be fully proven unless they are put into practice."

"Does that mean..."

"I will grant you permission to hire external mech pilots to participate in your experiments. They must voluntarily agree to cooperate with your arrangements after receiving whatever money it takes to put them at your disposal. The money that you are allowed to utilize for this purpose should not

come from your salary, but from a special research pool that you can fill up by contributing to our main mech designs. What this means is that as long as you do your job when working on regular design projects, you will get more leeway in performing your own experiments, understood?"

"I do. So the more I contribute, the greater my research budget?"

"That is correct. In any case, as long as your experiments have proven to be safe when using external mech pilots as test subjects, I will grant you permission to perform your subsequent trials of our own Larkinson mech pilots. Of course, the same rules apply as before. They must all agree to work with you on a voluntary basis and you will have to provide remuneration from the money you have previously earned. Is this an acceptable arrangement to you, Mr. Hempkamp."

"Oh, it is more than enough, sir. You have already given me more than enough room than I have ever received. If you will have me, I want to start as soon as possible!"

The Larkinson Clan gained its first true neural interface specialist after today. Whether Ves had made a mistake in taking in Cormaunt Hempkamp remained to be seen.

Chapter 4165 Trial Period

The entry of Cormaunt Hempkamp into the Design Department generated plenty of controversy at first.

"Ves, are you sure you know what you're doing?" Ketis confronted him a few days later. "While I respect your desire to hire a neural interface specialist, can't you look for a more reliable one instead of the new guy?"

He reacted with mild surprise at her response. "I thought that you of all people would look favorably upon his entry. He is a strong and passionate innovator who doesn't listen to anyone and sticks to his guns no matter the

circumstances. There are obvious parallels between your respective approaches."

The fiery swordsman mech specialist took affront at this comparison!

"We are not alike, Ves! While our approaches may look similar on the surface, our driving motivations are different! From the beginning of my career, I only ever wanted to design better and stronger swordsman mechs for the Swordmaidens. Later on, I extended my sights to every swordsman mech pilot I could reach. I might not have received classical education like the rest of the mech designers in the Design Department, but my heart has always been in the right place. As for that guy Hempkamp... my intuition tells me that he always puts his own ego first, and you know how sharp my intuition has become."

As if to emphasize her remark, a miniature version of Ketis emerged out of her head and waved around a miniature sword!

"Sharp! Sharp! Sharp!"

Though Ketis was not a smooth operator, she was quite good at judging other people due to her extraordinary willpower and enhanced intuition.

It said a lot when she sensed an unsettling vibe from Mr. Hempkamp. Ves never fully believed in all of the man's promises of good behavior. Innovators tended to be rulebreakers more often than not because there were always obstacles in the way that prevented them from pursuing their novel ideas to the fullest.

As an innovator himself, Ves could speak from personal experience.

However, as much as Ves was able to see himself in Hempkamp's shoes, they differed in one important fashion.

If Ves screwed up, he would suffer all of the blame.

If Mr. Hempkamp screwed up, his boss or employer were ultimately responsible!

It was because Hempkamp never fully worked in a situation where the buck stopped with him that he had grown so unbridled and unrestrained in his work.

This was why Ves had imposed a special regime on the newly-hired Journeyman.

As Ves explained his overall strategy and approach towards the potential time bomb, Ketis' expression softened to an extent.

"Your theories sound decent enough. I can't say whether Mr. Hempkamp will be fine with playing by the rules you have set, but I will keep an eye on him whenever I am in the vicinity."

Ves smiled and patted her shoulder. "You are more than welcome to do so. I have already instituted additional monitoring to keep a closer eye on his work and activities, but none of them are able to judge him on an instinctual level such as you. If you ever pick up a vibe from him that obviously feels wrong, don't hesitate to bring your suspicions up to me or Gloriana. No matter how uncertain you feel about Mr. Hempkamp, it is better to be safe than sorry."

"The safest option that you could have taken was to never hire him in the first place." Ketis stated as she crossed her arms. "Why did you go for him, really? Is it just because his design philosophy and research just happens to match well with your own, or is there more to the story?"

The Swordmaiden mech designer had grown in many different ways compared to a few years ago. She had advanced to Journeyman. She developed her first true solo mech designs with great commercial potential. She also became a mother to a healthy designer baby boy.

What was even more important was that she had worked in the Design Department by herself and alongside many other mech designers long enough to become a lot more professional in her work.

She had gradually shed her sloppy and unreliable image over time and became one of the senior stalwarts. The more junior lead designers who joined the clan only recently all looked up at her with admiration.

In fact, it was not wrong to state that Ketis was the third-ranked Journeyman of the Design Department. Her outsized sway among the Swordmaidens and the Heavensworders in the clan definitely helped with amplifying her voice!

Therefore, even though Ves was tired of explaining his decisions to different people, he had to give due consideration to his former student.

"Let's look at the Design Department as a whole." He began. "How many lead designers do we have at the moment?"

"There is you, your wife, me, Juliet Stamos, Sara Voiken, Dulo Voiken, Janassa Pellier, Tifi Coslone, Miles Tovar, Merrill O'Brian and finally Cormaunt Hempkamp. That is 11 in total."

A few years ago, Ves could never imagine working alongside so many Journeymen!

Back when Ves and Gloriana were in charge of everything, they could only work on a handful of major design projects per design round.

Now that both internal promotion and external recruitment had beefed up the upper end of the Design Department, the Larkinson Clan was no longer as limited in the amount of mechs it could design per year.

In fact, Ves even had the feeling that his clan had more lead designers than worthwhile projects to pursue!

While every lead designer had no trouble coming up with new design concepts and mech ideas that they wanted to realize, not all of them were particularly brilliant or innovative.

Still, he would rather be in a position where there was too much design capacity than too little!

At least now Ves no longer had to worry about delaying essential design projects by years because he and his fellow Larkinson mech designers were too backed up by high priority projects!

In any case, the addition of so many mech designers most definitely changed the dynamic within the Design Department.

"Of the eleven individuals that you have just mentioned, which one strikes you as more orthodox and normal mech designers?" Ves asked. "By that, I mean mech designers who you can rely upon to deliver solid design work that might not be interesting but will always do the job without fail."

The swordmaster thought for a moment. "Hmmm... Gloriana probably fits in this category, though you have clearly influenced her with your drive. Juliet, Sara, Dulo, Janassa, Tifi, Miles and Merrill are also stable in their approach, though I still haven't seen enough of the latter two to be absolutely certain."

"How many mech designers did you just mention?"

"Eight..."

"Exactly." Ves said. "Eight out of eleven of our mech designers are stable performers who can be relied upon to produce solid and reliable output. Now think for a moment. If these eight mech designers were the only ones working in the Design Department, would the LMC ever be able to rise up in the current market environment?"

Ketis immediately shook her head. "No. Gloriana might be able to do good business as a bespoke mech designer, but the rest... well, they are just Journeymen. Many of them have advanced only recently while the others offer decent value, but not enough to gain an edge over the competition."

Ves waved at her and then at himself. "Now look at the two of us. You did not include our names in your previous list. There are good reasons for that, but let us focus on one of them in particular. How does the commercial potential of our products compare to that of the other mech designers?"

"We are better." The swordmaster stated with strong conviction. "I might not fully do justice to their work, but when it comes to filling a new niche and achieving higher sales volumes, our work stands head over heels over whatever else they are able to design. Their design philosophies, while interesting and useful in their own right, simply aren't as unique and revolutionary as ours."

The recent commercial mech models that they released such as the Pacifier and the War Squire designed by Ves as well the Monster Slayer and the Needle Dancer designed by Ketis fully illustrated this disparity!

Ves and Ketis were so strong on this front that they were even capable of outselling the works designed by Master Mech Designers!

"Do you see?" Ves said. "While we certainly have our flaws, our more radical and unorthodox design philosophies are the key to our mech company's commercial success. We are the heart and the guiding beacon upon which the Living Mech Corporation can distinguish itself from the pack and earn a commanding market lead. The reason for that is because we dared to reach further and worked harder than anyone else to innovate and invent brilliant new solutions. That is a strength that only a few mech designers that I have seen in few mech designers."

"I see what you mean... wait, do you actually consider Mr. Hempkamp to be the same sort of mech designer as us?!" Ketis asked as she realized what Ves was trying to convey!

For his part, Ves shrugged in uncertainty. "I truly cannot say. There are more mech designers than the two types that I have just described. There are stable and reliable mech designers like my wife. There are adventurous and unorthodox mech designers such as you and I. There are also other colleagues who possess no moral bottom line and only care about their accomplishments as opposed to how much they can contribute to the greater community. I've encountered a few types like that, but I can't say whether Mr. Hempkamp belongs to the second or third type."

"So you just decided to accept him in the hopes that he is the second type?"

"Yes. Journeymen who are well-versed in neural interfaces are rare, Ketis. Who knows whether there are other employers who see the same promise in this mech designer. Controversial as he may be, he knows his craft. I don't want to wait years in order to stumble upon another eligible neural interface specialist."

"Okay. I understand now." Ketis nodded as she figured out his full approach.

"You are essentially putting him on trial right now. By giving him an independent lab straight away, you can keep an eye on him and observe whether he will turn into an uncontrollable factor. What will you do if he breaks the rules that you have set, Ves?"

Ves shrugged. "It depends. In general, I think I will still let him go, though. I have granted him much more generous treatment than he deserves. If he cannot appreciate the favors I have given him and the leeway that he has received from the start, then it is obvious that he will never respect our authority. We also won't be able to trust whether he is willing to put the interests of the clan ahead of his own. If that is the case, then I will make a

rare exception to our established rules and boot him out of our clan before he does more damage."

"Do you think it will come to that, Ves?"

"If he has retained enough rationality to figure out his best options, then he should clearly keep a lid on his more extreme impulses. I think he knows quite well that we are the best possible employer he can work with at this stage. Once he has ruined his chances with us, he will never receive the leeway that we have extended to him in his life."

Despite his certain tone, Ves was anything but assured that Cormaunt Hempkamp would make the best choices.

Logic was one thing, but Ves had seen many cases where irrational emotions and desires trumped sound decision-making.

This was why the coming year was extremely crucial. Would Hempkamp truly be able to exhibit enough self-control to become a productive member of the Larkinson Clan or would he prove to be the same liability as in his previous jobs?

Chapter 4166 Jobs For Poor People

Cormaunt Hempkamp did not stick his neck out too much in the initial months.

Though he was ecstatic about gaining access to his own research lab where he could tinker with any neural interfaces without too many restrictions, he still had to work his way into the regular structure of the Design Department.

At first, his contributions to the ongoing design projects were fairly basic but helpful.

He did not attempt to push any of his quirky neural interface models that he had designed in the past.

Instead, he served as a consultant that accessed the MTA's secret catalog and selected the most appropriate neural interface models for every mech design.

Whether the mech designs in questions were alive, light, heavy, ranged, melee, cheap, expensive, commercial or Larkinson-exclusive, the man was able to match them with neural interface models that always seemed more appropriate for the occasion.

"Heavier mechs are burdened with more components and systems. You can't fit them with neural interfaces that are prone to overloading the mech pilots with too much data and too much control."

"No no no! What have you been doing all this time?! A light mech such as the Ferocious Piranha needs a neural interface that prioritizes speed and acuity over every other priority! There are many neural interface models that are much more suited to a light mech that needs to move quickly and fight even faster."

"Just because a scouting mech is a light mech doesn't mean it should carry the same neural interface as the Ferocious Piranha. While they possess the same weight class, they are completely different in operation! A proper scouting mech such as this Light Bearer needs to be paired with a neural interface that is extra attuned to sensor input data. Look at the line of neural interfaces over here. Each of them are capable of attuning the mech pilot to a specific type of sensor system. One of them makes a mech pilot especially sensitive towards visual patterns. Another provides a more comprehensive understanding of gravitic fluctuations on the battlefield. Wait, you never heard about them before? Have you been living under a rock?!"

Though Hempkamp grew awfully abrasive and direct at times, his input was always valuable. The man introduced more nuances and variations of neural interfaces to the Design Department than anyone else had ever done!

He was truly an authority when it came to neural interfaces!

In the first half year of his entry into the clan, Hempkamp steadily acclimated into the clan. He learned what it meant to be a Larkinson and also became familiar with the loose and friendly atmosphere of the Design Department.

What surprised him a lot at first was how much Ves and Gloriana were willing to allow the lead designers to do their own thing.

"Perhaps it is because you are a Journeyman yourself, but I did not expect that you are willing to extend so much trust and autonomy to the newcomers to this position." Hempkamp told Ves during a private meeting. "The hierarchy was much more fixed and structured at the other companies I worked with. We were only supposed to do what the Masters and Seniors told us to do, essentially."

"That is because the Seniors and Masters are the lead designers in those larger and established mech companies. Our LMC might not be as large or established, but there are advantages to joining a younger and more versatile mech company. You have joined us at a great time. We have already developed to the point where we are financially stable and successful, but we still have a lot more room for growth. This means that your contributions and your design philosophy can help us grow even faster than before."

"I will do my best to be of use to you all." Hempkamp sincerely said. "It feels enormously gratifying to make a real difference in the piloting experience of your famous living mechs. I did not feel as accomplished as before even though I worked longer hours at my previous employers."

Ves smirked. "That is because your superiors were the ones who were making all of the meaningful design choices. We are a bit more open here. As long as you are a lead designer, your input will always be valued, especially when the topic is related to your specialty. We are quite simple in this regard.

As long as you can prove your input can improve the performance of our mechs, then we will accept your contribution. Simple as that."

Perhaps that might change in the future, but for now the Design Department was still open towards different forms of advice. Even assistant mech designers had the opportunity to affect the direction of a mech design project in a limited fashion, though instances like these were rare due to their shallow understanding of mechs.

As Mr. Hempkamp continued to integrate into the Design Department, he began to earn merits as well as credit for successful mech designs.

Picking and choosing better and more optimized neural interfaces for different mech designs indeed made a difference to the piloting experience.

Direct comparisons between mechs with ordinary neural interfaces and those with more optimal choices revealed that the performance boost was quite modest, but still evident.

The overall improvement amounted to just 2 percent, which did not sound like much but already sounded like welcome news to Ves and the other mech designers.

The reason why the improvement rate was not higher was because the Larkinson mechs were already comfortable to pilot to begin with. What Ves had done was solve a part of the problem that more specialized neural interfaces tried to solve.

Though Mr. Hempkamp received more and more recognition for his contributions, he was far from satisfied with his current results.

"The neural interface models that I have matched to all of your mechs are still better than the available alternatives, but they don't go far enough. They are too standardized. Each of them are developed in order to maximize compatibility with as many mech designs as possible. They are not fully

configured to work with specific configurations of mechs, and they are especially not designed to accommodate the distinctive traits associated with living mechs."

Now that Cormaunt Hempkamp successfully got his bearings in the Design Department, the time had come for him to develop more comprehensive contributions to the Larkinson Clan.

He had worked on enough Larkinson mech design projects to develop a basic understanding of living mechs.

The strange but extremely helpful sessions where he connected to the mind of Ves and other mech designers through the design network played a pivotal role in helping him come up with a viable approach to develop a neural interface specific to Ves' iconic works!

Since Ves was able to understand Mr. Hempkamp's perspective as well through the design network, he had an inkling of what the newest Journeyman to join the clan had in mind.

"What you're thinking about sounds crazy on the surface." Ves stated right away. "Treating a living mech like an intelligent exobeast and forcibly establishing a deeper and more intimate channel between it and a mech pilot not only sounds reckless, it also sounds like a great way to destroy a person's life and go to jail for this transgression!"

"You've peeked into my mind, sir. You should have seen how beneficial it can be for the mech pilot to develop a deeper and more comprehensive understanding of their living mechs!" Hempkamp tried to argue to Ves. "Just like how humans have understood the thinking and behavioral patterns of exobeasts through controlled interfacing sessions, I think we can provide the same benefits but with living mechs as the primary subject!"

Ves firmly shook his head. "I did catch a good glimpse of what goes on in your head. Did you know what I think? You are thinking way too much about the gains and not enough about the potential dangers! How can you go so long as a Journeyman without making any decent attempt to account for all of the risk factors of your inventions?! Your near-total disregard for the damage that you can inflict on people's lives is truly appalling!"

"I did not see much of that in your mind either, Mr. Larkinson."

"I AM DIFFERENT!" Ves insisted. "My work doesn't instantly kill or cripple the mech pilots who I serve. My living mechs are also able to address and correct their own perceived flaws and shortcomings. In other words, in my field, the tolerance for mistakes are high while the consequences of making errors are fairly low. It is the exact opposite in your case!"

Ves and Hempkamp did not see eye-to-eye with regard to the latter's research direction.

It took a long time for Ves to convince Hempkamp to take it slow and focus on attaining incremental progress first rather than try to revolutionize the field of neural interfaces right away!

Once Hempkamp built up a sufficient research budget after making enough regular contributions, he no longer spent as much time on study and preparation and began to conduct more practical experiments.

Due to the fact that the Larkinson Clan had decided to settle in Davute for a time, Hempkamp had easy access to the port system's large and expanding manpower pool.

There were plenty of mech pilots available for employment in Davute's job market!

Of course, the demand for skilled and experienced mech pilots was high. Many of them already found excellent jobs before they even put out their resumes.

Since a lot of large and powerful organizations in the Red Ocean were preparing for a war that might break out within the next decade, they already started an arms race among themselves.

Any organization or group that could field the least amount of mechs on the battlefield would most definitely fall behind in the event a war broke out in the region!

Therefore, all of the good mech pilots found employment rather quickly, which meant that the ones that stuck around in the job market were almost always less desirable.

Their genetic aptitudes were lower, the grades they earned during their cadet days were not as great and their attitudes were less than perfect.

How they managed to reach the Red Ocean and travel all the way to Davute was a mystery.

In any case, while many of these mech pilots were able to get by from day to day by relying on their accumulated savings or by performing menial jobs such as piloting industrial mechs, there were still plenty of pilots who were running low on funds.

Cormaunt Hempkamp found out that it was ridiculously easy to bribe these poor and desperate mech pilots into offering up their bodies and minds for science!

"Psst. Hey you. Would you like to earn a millicredit in just a single day? I will pay double the sum a day if you take part in my research for at least a week."

The purchasing power of MTA credits was high, especially in a second-class star system like Davute. Offering a sum of just 0.001 MTA credits or a bit more a day was enough to lure mech pilots into signing a contract that expressed their willingness to subject themselves to potentially dangerous experiments!

While there were plenty of mech pilots that balked at this deal, Hempkamp still found plenty of suckers that were less capable of assessing risks!

With the help of these paid volunteers, the eager neural interface specialist finally conducted his first proper series of experiments related to his core specialty.

Ves initially grew so concerned that he tapped additional manpower to supervise his work more closely.

Fortunately, no horror stories came out of Hempkamp's private research lab after a time. All of the test subjects only stayed for a while before they happily departed from the Cat Nest with extra funds in their bank accounts.

This was a win-win proposition that kept everyone happy. Despite his impatience, Hempkamp did not engage in any extreme research projects and focused his efforts solely on developing smaller design solutions in order to make more immediate gains.

It only took two months since his initial experiments for Mr. Hempkamp to present his first proper design application to the Larkinsons.

Chapter 4167 Mystery Process

Ves entered Hempkamp's private research lab with both anticipation and trepidation in his mind.

Despite keeping a fairly close eye on Hempkamp's ongoing research projects, Ves lacked the expertise to fully understand the research that took place in this chamber.

While it looked as if Cormaunt Hempkamp stayed within the lines that Ves had set, who knew whether this was actually the case.

Another concern Ves had of Hempkamp was whether his first completed research project was safe enough to be utilized in any new and ongoing design projects.

If Ves was forced to shoot down Hempkamp's work despite the man's admirable restraint, who knew what he would do afterwards.

This was why he hoped that Hempkamp truly succeeded in delivering a real result that could provide solid benefits when put into use. The Larkinson Clan could truly use all of the advantages that it could get, and making better use of neural interfaces sounded like a good way to improve the actual combat performance of its mech units.

The research lab that Ves had set up in an available space inside the Genesis Lab did not look unusual.

Hempkamp had done little to rearrange the interior. The only real element he added to the lab was bringing in different living mechs every now and then to conduct experiments that required their usage.

Right now, Hempkamp had brought in a Transcendent Punisher of all choices.

The heavy mech possessed an imposing presence due to its bulk, but also exuded a sense of sacred purpose due to its Ylvaine-derived glow.

The combination between the two made it seem as if the Transcendent Punisher was ready to shoot down demons with extreme prejudice!

The age of the Transcendent Punisher also contributed a lot to its presence. Ves could immediately spot many different clues that told him that the mech was among the batch of earlier heavy artillery mechs that the Larkinson Clan had produced.

The mech enjoyed a good life and had developed an excellent cooperation with its Ylvainan mech pilot. It had already developed a character of its own, though it was still a distance away from evolving into a third order living mech.

At this time, the Larkinson Clan was already midway into its comprehensive upgrade and refit process. A lot of existing Larkinson mechs had been upgraded from their original incarnations to the Mark II or Mark III versions of their models.

The Design Department had yet to update the Transcendent Punisher design to the current standards of the clan, but it was only a matter of time before it happened.

Ves just wanted to wait for a while in order to see whether his clan could gain access to a mass production version of a transphasic artillery cannon system.

Even if the penetrative power of more economical transphasic weapon systems was not that significant, they still dealt a lot more effective damage towards ordinary targets!

That was a consideration for another day, though. For now, the Transcendent Punisher design had changed little since he had completed it years ago. It was still a rim-level heavy artillery mech that possessed decent damage output and excelled at accuracy by taking advantage of special means.

"Tell me why you brought a Transcendent Punisher in your lab." Ves requested as soon as he approached the eager-looking neural interface specialist. "Why experiment with this mech instead of the many other ones that we have available?"

Hempkamp smiled as he turned towards Ves. "I chose this model to demonstrate my progress because it responds best to what I have in mind. It may be large, but it is relatively simple in purpose and in its metaphysical traits. It is a mech that you have designed in a way that is highly compatible

with its design spirit. It is a literally an Ylvainan mech that honors the individual known as Ylvaine. I enjoy working with unitary mech models like the Transcendent Punisher because the variables aren't as complicated."

"Couldn't you have gone for other mech models, then?" Ves asked. "Why not opt for a Bright Warrior, for example?"

"The Bright Warrior is a fine mech all-considered, but it is too unfocused and not specific enough for me. You will find that my design solution doesn't actually work that well with this specific model."

Ves was willing to accept that explanation. "Please proceed with your experiment."

"Very well. Let me bring in the mech pilot that is bonded to this machine. The first step is to measure and observe the performance of this pair in the MSTs."

By now, every Larkinson mech had gained a connection to the Mental Simulation Training System.

Though it started out as an add-on and a unique selling point of the War Squire model, there was no rule that prohibited Ves from connecting his new spiritual simulation program to all of his other living mechs!

He had updated all of the mech models that were in use by his clan and made it so that every Larkinson mech pilot was able to engage this function.

While Ves also had the option to extend this function to his customers who bought the LMC's commercial offerings, he did not do so for many reasons.

For now, only the users of the War Squire and the mech pilots of his own clan were able to make use of this valuable and extremely effective simulation training system!

The mech pilot, who turned out to be an ordinary pilot of the Eye of Ylvaine, began to show off his skills in the MSTs.

Having piloted his Transcendent Punisher for several years, the Ylvainan mech pilot acquitted himself well in the simulated battle scenario.

The mech pilot knew the properties of all of the cannons well. His accuracy with each of the guns was fairly high as well.

Naturally, battle performance skyrocketed when he engaged the Transcendent Punisher's signature Guided Aim triggered ability.

Eventually, the simulated artillery mech got overrun when a flood of light mechs reached its position and turned its vulnerable rear into a pincushion.

"What do you think about the battle performance that you have just witnessed?" Hempkamp asked.

"It's good." Ves immediately judged. "Though the Transcendent Punisher is not that great of a mech anymore, the cooperation between mech and mech pilot is excellent. I expect nothing less after years of training. It would be very hard for a new recruit to gain this level of familiarity, proficiency and reaction speed without spending just as much time in familiarizing with all of the quirks and nuances of the Transcendent Punisher model."

"Under normal circumstances, do you think this Ylvainan mech pilot will be able to achieve a better score through persistent training and other efforts?"

"Hmmm." Ves rubbed his smooth-shaven chin. "I would say the chances that he can increase his score are limited. I can roughly tell that he has already peaked in his training. Barring any actual battles where he can make a breakthrough in other aspects, he has already approached his ceiling. It should take numerous years for him to increase his average performance by more than 5 percent. After a certain amount of years, his performance will stagnate and even begin to decline as age takes its toll."

It was not necessarily the case that older mech pilots were better mech pilots. While they were certainly wiser, more skilled and more experienced, the younger generation possessed much better reflexes and weren't weighed down by as much baggage.

Hempkamp knew that as well, which was why he picked this particular combination of mech and mech pilot to show off his research results.

"Please allow me to apply my new procedure to the mech and mech pilot. This will take at least ten minutes due to all of the checks I need to make."

"You may proceed."

Cormaunt Hempkamp showed exceedingly great care. He did not move quickly and made sure to do everything properly. With Ves watching over his shoulders, he did not dare to act sloppy!

Once he verified that all of the equipment was working fine, he transmitted a command that activated a new and completely original sub-system that Hempkamp had added to the Transcendent Punisher's neural interface module.

Ves could see from the cockpit feed that the Ylvainan mech pilot had frozen into place at this time!

"I have made it so that the Ylvainan mech pilot stays in place at his current posture when subjected to my new procedure." The neural interface specialist explained. "Right now, the mech pilot and the mech are bonding with each other through a special man-machine connection. This connection is not meant to facilitate mech piloting, so the mech cannot be controlled in this state. The connection is purely dedicated towards data exchange on a deeper and more profound level. You can think of it as connecting the two subjects together with one of your design networks, but one that is trying to achieve more than letting the two grow more familiar with each other."

"What is going on, exactly?" Ves puzzlingly asked as he felt rather unsettled at his lack of understanding of the current procedure.

While nothing wrong had happened when Hempkamp performed similar experiments on paid volunteers that he had picked up from the job market, this was different.

Fortunately, the mysterious process only lasted a few minutes. Once the added sub-system powered down, the Ylvainan mech pilot regained his awareness and his wits with no apparent problems.

The only interesting change that Ves could observe from his vantage point was that the mech pilot had grown a lot more intimate towards his mech!

Compared to the rather mild reaction of the mech pilot, Ves noticed an even greater difference from the mech.

The Transcendent Punisher had suddenly become a lot more responsive and active towards its mech pilot!

"Wait. What the..."

When Ves swept his spiritual senses towards the Transcendent Punisher's spiritual foundation, he discovered that it had not only grown in a substantial fashion, but that it had also made a significant leap towards evolving into a third order living mech!

Hempkamp smiled. "I see that you have already noticed one of the changes that my design application can produce. This is only part of the story. You should take a look at the pair's performance now that they have undergone my new procedure."

Under the man's direction, the Ylvainan mech pilot engaged the MSTs once again.

As the simulated Transcendent Punisher began to fight against similar waves of incoming enemies, Ves immediately noticed the differences in performance.

Compared to the first simulated battle, the artillery mech clearly performed a little bit better.

The difference wasn't drastic. It was not as if the mech pilot suddenly turned into a superstar or anything.

What actually happened was that the Ylvainan pilot made more efficient use of his machine. Ves had thought that the individual in question already hit a ceiling in how much he could improve, but clearly this was the wrong assumption!

From what Ves could see, the pilot not only exhibited slightly better piloting skills, but also utilized and balanced the various systems and parts of his mech to a significantly finer degree!

By cleaning up his piloting style and removing a lot of inefficiencies and suboptimal habits, the mech pilot managed to draw out more of the potential of the Transcendent Punisher than before!

While the heavy artillery mech still succumbed to the same wave of light mechs in the end, it had taken down significantly more targets in the process!

Ves glanced at the numerical score that judged how well the pair performed in this battle scenario.

"The score is 9 percent higher than before!"

This effectively meant that the Transcendent Punisher and its mech pilot had improved their overall combat effectiveness by 9 percent!

The most remarkable aspect about all of this was that it only took a couple of minutes to make this change!

Combined with the fact that this mystery process actually caused the Transcendent Punisher to make a substantial step closer to becoming a fully aware third order living mech, it was clear that Hempkamp's innovation deserved a deeper look!

"Please explain what you have done and how your new solution is able to produce such a drastic improvement in performance."

Chapter 4168 Deep Exchange

Although Cormaunt Hempkamp only conducted a single experiment, the results exceeded Ves' expectations!

It was one thing to accelerate the training of a rookie mech pilot and speed up his familiarization process with a specific mech.

It was another thing entirely to achieve the same effect on a veteran mech pilot!

Ves had read the profile of the Ylvainan mech pilot carefully and understood that while the fellow did not possess excellent talent, he made up for it with diligence and devotion.

The mech pilots of the Eye of Ylvaine had always stood out for their dedication to their holy service, but the test subject who volunteered for this test had already mastered the Transcendent Punisher to a high degree.

Common sense dictated that it took a disproportionate amount of time and effort to achieve further incremental improvements. Ves had already been certain that the pilot had approached his skill ceiling!

Were his assumptions wrong, or did Hempkamp's mysterious procedure involving an add-on to the Transcendent Punisher's neural interface open up a possibility that did not exist before!

As Ves accessed the data logs and studied the numbers and graphs, he tried to determine what exactly happened.

By comparing the data from the two separate practice runs, one conducted before the procedure and one conducted afterwards, Ves was able to compare the results of both.

Since the two simulated battle scenarios were almost identical to each other, Ves easily picked up a lot of clues by looking at where the data sets contrasted with each other.

His first preliminary conclusion was that the biggest area of improvement was the skill of the mech pilot.

The Ylvainan soldier had somehow broken through the ceiling that he had never been able to surpass until today.

Indicators such as hit rate, target prediction, tracking accuracy and so on had all improved by a small but significant degree.

These were aspects that were notoriously difficult to improve in leaps and bounds!

To the vast majority of mech pilots, it took weeks, months and even years of training to achieve measurable improvement in these areas once they already attained enough proficiency!

"There's more."

As Ves studied the data further, he noticed that the mech pilot improved in many other areas as well. These concerned areas that were a lot subtler, to the point where many mech pilots didn't even know they could manipulate these areas!

For example, he noticed that the Ylvainan mech pilot had become a bit better at juggling the energy management of his mech.

As a heavy artillery mech, the Transcendent Punisher was both massive and powerful, but that also meant that it needed to be fed with a lot of energy!

It was anything but simple to supply the right amount of energy to the right part at the same time.

What made this factor even more complicated was that all of the activity also generated a lot of heat. No matter how many heatsinks the heavy mech possessed, its heavy positron cannons generated so much waste heat when it was firing at maximum capacity that the machine practically turned into an oven!

Therefore, every mech pilot assigned to the Transcendent Punisher had to learn how to manage its energy consumption and heat buildup while at the same time keeping its damage output as high as possible.

While Ves knew enough about the Transcendent Punisher to know how to best juggle all of these changing variables, he was not a mech pilot so it was impossible for him to demonstrate what he could accomplish in the cockpit.

The mech pilots assigned to the Transcendent Punisher did not know any of the science or the exact tolerances of every part or system, so their ability to control their mech to such a fine degree was limited.

Until now.

When Ves swept his gaze away from the data, he came up with an answer that explained much of why the performance of the Ylvainan mech pilot had improved so rapidly.

"The test subject understands how the Transcendent Punisher works on a much more profound level, is that correct?"

Hempkamp grinned and nodded. "That is one of the changes that my process has produced. Much more has taken place than that. This is because my procedure is much more profound than what is apparent on the surface. Look at how much better the mech pilot is able to get along with his machine."

Ves turned and observed the mech pilot. Even as the test had come to an end, the Ylvainan pilot was not in a hurry to leave the cockpit.

The man remained in his seat but closed his eyes and concentrated towards his mech.

He was actively communing with his machine outside of a man-machine connection!

While it was theoretically possible for any mech pilot to interact with a living mech, in practice the two had to be quite close. The mech in question also had to experience a lot of growth before it was capable of reaching out on an independent basis.

For both the mech pilot and the mech to reach this level of intimacy and mutual understanding was remarkable!

The degree of synergy between them had approached the level of a pairing between an expert pilot and expert mech!

Ves grew a lot more interested at what exactly Hempkamp managed to do with his odd addition to the Transcendent Punisher.

"Please explain what you tried to accomplish and what you have managed to realize."

"Let me wrap up this experiment first, sir. I will be glad to explain my full layout to you once I have summarized the data from the latest test."

It took half an hour for Hempkamp to wrap up the experiment and analyze the data. This was the first time he had tested his new tech on a Larkinson mech pilot, and the results were better than he expected.

Once Hempkamp sat down in front of Ves, the neural interface specialist finally presented the full scope of his recent work.

"Do you recall what I am trying to accomplish?"

"I do. You want to increase mutual understanding between mechs and mech pilots." Ves spoke. "You want to leverage the more direct neural interface technology developed by the biotech industry to facilitate a deeper exchange of information and knowledge. One of your goals is to make the mech pilot understand the properties and operation of a mech to a much finer degree than is possible through conventional training and learning methods."

"That is correct, more or less. I have discovered that I can attain additional goals when the mechs in question are alive. Since living mechs have more in common with exobeasts than other animals, I can essentially treat the machines that you have designed as living animals in the form of mechs."

"How does that change the equation, exactly?" Ves curiously asked.

"It changes everything. In the biotech industry, there are specialized researchers who bond with interesting exobeasts with the assistance of specialized neural interfaces. By connecting their minds with the minds of non-human organisms through a special channel, they can do more than pass on information about themselves to each other. They can also pass on a portion of their biases, attitudes and even instincts!"

"What is the point of this? Isn't this dangerous?"

"It is not without risk." Hempkamp admitted. "However, when done correctly, the biotech researcher gains so much more clarity of the exobeast that it is as if he has spent half of his life living as the creature in question. What is also interesting is that the exobeast has also benefited from this exchange. The animal has absorbed human thinking patterns, habits and other elements that are typically associated with our kind. This means that the beast has not only grown tamer, but might even gain sentience when its species originally was not capable of developing its intelligence to this degree!"

The biotech industry tended to attract a lot of crazies. Ves was not surprised at all that certain researchers were so extreme in their pursuit of knowledge that they even invented a risky procedure that not only caused them to be contaminated by beastly instincts, but also turned their exobeast subjects into much more intelligent monsters!

Ves could easily imagine how this could go wrong! It was a surprise that the Big Two hadn't shut down this crazy line of research!

"I completely understand that you feel unsettled by the act of bringing humans and exobeasts closer together, but my work is different." Hempkamp claimed. "What I have done is bring mech pilots closer to their mechs, which is much less controversial!"

"Are there any downsides to this process?"

"I will need to conduct further studies on that, but from what I can say so far, there are no negative consequences that I can detect. You can see for yourself that the test subject has not changed for the worse. The Transcendent Punisher has not degraded either. In fact, I can vaguely feel that it has grown stronger and more defined. Both sides has benefited from their brief exchange!"

"Hmmm..."

Though Ves was skeptical of Hempkamp's optimistic claims, if his words turned out to be true, then this was definitely a procedure that could quickly raise the battle effectiveness of all of his mech pilots!

"Have you tested the same procedure with non-living mechs?"

"I did, but the results weren't nearly as dramatic." Hempkamp admitted. "As I have mentioned before, since living mechs are truly alive in a sense, they can not only share more information to the mech pilot, but absorb much more for the human as well. It is as if my invention is made for your mechs!"

"Can this process be repeated in order to achieve better results?"

"No. Unfortunately not, sir. A single deep exchange is enough to conduct the 'trade', as it were. Activating the procedure again when the mech pilot and the living mech are exactly the same as before will result in relatively little new exchanges. The only instances where it is useful to perform it again is if the pairing is different or if the mech pilot and the living mech have changed significantly over time. For example, if you ever upgrade the Transcendent Punisher in the future, it will be useful to conduct this exchange again."

As Ves asked more questions and found out more details about this strange new improvement method, he eventually understood the gist of Hempkamp's new solution.

It was not a new systematic training method nor a different form of mech piloting. It was a cheat that temporarily removed a number of barriers between the mech pilot and the living mech so that they could essentially borrow elements from each other!

"Although I do not know how literally you should take this, I believe that my solution can eventually blur the lines between the mech pilot and his mech." Hempkamp ambitiously claimed. "I have heard that high-ranking mechs and mech pilots are already trying to move in this direction on an individual basis, but I am convinced that ordinary mech pilots can enjoy the same benefits by developing better and more specialized neural interfaces! The tech already allows man and machine to connect with each other. What I am trying to do is nothing more than to expand upon the capabilities of this tech so that the two parties can truly merge with each other one day!"

Ves was quite impressed with this ambitious goal!

Though he was not certain at all whether Hempkamp could establish a new form of empowerment that was normally exclusive to high-ranking mechs and

mech pilots, the benefits to the mech community were enormous if the neural interface specialist was truly able to realize his dreams!

Of course, the difficulty of making such an ambitious and impossible-sounding goal come true was an entirely different matter.

Ves didn't mind too much. Even if Hempkamp came up short in the end, the advancements he could make during his career would doubtlessly be useful in different ways!

One of those advancements was the new tech that he had long been working on but could never put into practice due to all kinds of restrictions.

His desire to prove his work was viable along with the need to demonstrate his value to the Larkinsons allowed Hempkamp to succeed in his first practical implementation of his ideas!

Ves directed an appraising gaze towards the neural interface specialist. He wondered what else Hempkamp might have in store.

"Do you have any follow-up research in mind?"

"Oh, plenty, sir. What I have just shown to you earlier is a process that I have called First Stage Man-Machine Deep Exchange. It is the easiest and most superficial exchange that I could make. Once I have extensively studied and refined this application, I will start working on the Second Stage version of my exclusive tech. I never thought it was viable for me to develop an even deeper exchange with ordinary mechs, but your living mechs are so much more relevant to my specialty that I think I can achieve actual results!"

"What does this Second Stage of yours entail?" Ves curiously asked.

"Have you ever heard about the notion of establishing Unity of Man and Machine on command? What if I can tell you that I can develop a system

where the mech pilot only has to press a single button to enter this extraordinary state of mind?"

Chapter 4169 Unsung Hero

Mr. Hempkamp cleverly dangled the possibility of allowing mech pilots to enter a state of Unity of Man and Machine to Ves.

However, this remained a distant theoretical possibility for now. The amount of work, effort and brilliance required to enable any mech pilot to attain this mythical state with a single press of the button was enormous!

No matter how brilliant Hempkamp had proven to be, there was no way he could develop a successful implementation of this tech within a single decade or generation!

Though Ves was not fooled by Hempkamp's exaggerated boasts, there was no denying that the newly-recruited Journeyman possessed real substance!

His earlier contributions to every design project had already yielded slightly better results. His ability to match the right neural interfaces to the right mech designs made every Larkinson mech slightly more effective in battle than before.

His so-called 'First Stage Man-Machine Deep Exchange' was something different entirely, but happened to be highly practical and easy to implement throughout the Larkinson Clan!

"So these are the parts that are responsible for enabling the deep exchange process. They're... smaller than I expected."

Ves looked down at a workshop table and studied the handful of components that the neural interface specialist had laid out. Each of them were no larger than the size of his hand. Many of them were smaller than his finger, in fact!

When Hempkamp put it all together, he created a module that could easily be attached to the neural interface of an existing mech as long as there was space.

Even if there wasn't any space, additional room could easily be created by modifying the cockpit.

Ves still had a hard time believing that such small components could achieve such a drastic improvement in performance.

Then again, his own design philosophy was even more ridiculous considering that his spiritual work did not occupy any material space!

"How does this ensemble cost?" Ves critically asked.

"Almost nothing compared to the price of a full-sized mech." The other man answered. "There is nothing special about these components. Their main role is to enable the existing neural interface of a mech to establish a different form of connection. That is all. To put it in another way, my work is mostly software-based rather than hardware-based. I can already do much of the work by altering the programming of a mech. This extra module is only necessary to enhance the stability and safety of a deep exchange, since ordinary neural interface models are not equipped to perform these functions."

"I understand."

Ves could already tell that the components weren't too expensive either. They were made from regular if sturdy materials.

This made it a lot easier to install this new add-on to the tens of thousands of mechs in use by the Larkinson Clan!

"Do these add-ons have to be adapted to every specific mech model or variant or are you able to apply a single universal version to every mech?"

"Ah, they are not universal, unfortunately." Hempkamp apologetically answered. "They need to be designed specifically for every model and variant because of many different reasons, such as the different models of neural interfaces that they employ. What I can tell you is that the changes that I have to make are minimal if I apply them to variants that share a great resemblance to the original model. I can even outsource much of the work to assistant mech designers who possess a background in neural interface technology."

Ves discussed this topic further with Mr. Hempkamp. Though it took a lot of work and effort to upgrade all of the existing Larkinson mechs with this special add-on, Ves truly felt it was worthwhile to implement it on a large scale.

"If you can conduct more tests between different mech pilots and living mechs and prove that your tech is both safe, practical and effective, I have no qualms in spreading it throughout the Larkinson Army. I think that every mech pilot in our clan deserves to receive the best of what we can offer, and this brilliant little solution of yours is exactly what they need to give them an extra edge over our rivals!"

This was music to Hempkamp's ears! "Thank you, sir! I have always wanted to prove that my work is both safe and useful! I will do my best to reciprocate the trust that you have invested in me. I would like nothing more than to have many mech pilots benefit from my work."

The man craved validation. Ves knew that and readily gave him an opportunity to obtain it through his own work.

However, the plan outlined by Ves did not fully match Hempkamp's intent.

"What about other mech pilots, sir? The public and more specifically the customers of our products deserve to enjoy the same benefits as well. Think of how much this innovation will supercharge our sales. Every user of our commercial mech is able to display much more battle strength in a shorter

amount of time. The improved performance of our mechs across the board will most certainly get noticed by the mech market, which means that the demand for our products will rise significantly! Other than that, the mech pilots who have tasted this benefit will become a lot more attached and bonded to our living mechs, making it much more likely that they will turn into our fixed customers and users in the future!"

Hempkamp's analysis of the positive business impact that his First Stage Man-Machine Deep Exchange tech could accomplish in a short amount of time sounded plausible.

That did not mean that Ves was ready to accept his recommendation. He held up a palm.

"Slow down, Mr. Hempkamp. I don't know if you have noticed, but here in the Larkinson Clan, we generally abide by a rule that states that we keep all of the good stuff to ourselves. This applies to our uncommon but effective luminar crystal technology as well as our recently-developed MSTs. While we are open to putting out our exclusive solutions onto the market whenever it is appropriate, we need to make sure that our Larkinson forces maintain a decisive edge over our rivals and future opponents. Do you understand?"

The neural interface specialist looked a lot less pleased at this reminder. "I am... aware... of this custom. While I am happy that our fellow soldiers will be able to benefit from my original work, I have to say that it is a disappointment that I cannot share my contribution to the rest of the mech community."

This could be a problem. Ves' instincts did not warn him of anything, but his judgment and understanding told him that Cormaunt Hempkamp was an eager researcher with a burning need to prove himself to everyone who doubted his work.

The man possessed a great desire to stand up in front of the whole mech industry and prove all of those doddering old fogeys wrong for passing off his work as reckless and dangerous!

Still, as much as Ves was willing to help Hempkamp earn proper recognition for his work, the needs of the clan came first.

"Mr. Hempkamp, listen to me. I understand your need to prove yourself to your former employers and everyone else. I truly do. There are many mech designers in the industry who share the same desires, but much of their work goes unsung. These are the people who work in secret labs that quietly work on designing and improving military mechs, many of which have never fully showcased their capabilities in combat. The mech designers responsible for working on these secret projects gladly do so in order to ensure that their state or organization maintain a decisive advantage over the enemy. All of these mech designers are able and willing to forgo fame in order to serve the greater good. Will you be able to adopt this role as well?"

"I..."

"You don't have to remain unsung forever." Ves quickly added. "This is only a temporary condition. As long as our clan and our mechs grow stronger, it becomes less of a priority to keep our advantages hidden. We already have a habit of slowly granting access to our exclusive tech to our favored clients and eventually the rest of the mech market. What is vital is that we make sure that we maintain a clear advantage in the early stages of our clan's development. Once we have grown a lot stronger than before, there is little risk to spreading out tech like your new deep exchange technology."

That sounded a lot more tolerable to Hempkamp, if only partially.

"How long will I have to remain unsung, as you have described?"

"I can't say. It depends on many factors. The stronger we become, the less we will lose from spreading out your tech. We must all work as hard as possible in order to progress to this point. If you help us by developing additional design solutions that can speed up the evolution of our mechs, then your work will eventually trickle down to the public. I can promise you that, at least."

His remark settled Hempkamp down, at least for the time being.

In any case, the progress he made in the short time he joined the Larkinson Clan was already a lot more than he had accomplished in the last decade. There was little reason for the newcomer to feel dissatisfied with the arrangements made by the Larkinsons.

"Focus on completing your current research first." Ves said as he patted his hand on the man's shoulder. "What you have just accomplished is only a first-generation product. Try and explore ways on how to improve and refine it so that mech pilots and living mechs can gain even greater benefits from each other. Don't be in a rush to chase after fame and recognition. You can easily earn as much recognition as you want as long as your work is good enough to earn people's appreciation. You need far more than just a single invention to earn credibility."

Hempkamp fully tempered his eagerness to move quickly. "... understand, sir. I will make sure to go through the steps properly."

Ves promptly proceeded to work together with Hempkamp to complete his research and verify that his new tech was safe and viable.

After that, Hempkamp received a new assignment that tasked him with spreading this tech to every existing and future Larkinson mech.

With the help of a design team that was specialized in working with neural interfaces, Hempkamp subsequently updated the designs of every Larkinson mech with the so-called deep exchange add-on.

A lot of Larkinson mech pilots performed better all of a sudden!

No matter whether they were the elites from the Avatars of Myth or the more laid-back members of the Living Sentinels, all of them demonstrated remarkably better piloting skill and cooperation with their living mechs after making use of this brilliant little function!

Flush with success, Hempkamp eagerly refined his deep exchange tech. He also invested more time in his other research projects, as he did not want to remain limited to mastering a single application.

Ves was happy with the changes. Along with the other initiatives the clan had undertaken in recent times, his expeditionary fleet would definitely be ready to head towards the deep frontier at the end of the rearming process!

He leaned back on his chair and placed his feet on his desk.

Lucky adjusted his body as he laid on Ves' lap.

"With all of the mechs and expert mechs at our disposal, I don't think that many enemies can pose a threat to us at this point."

"Meow."

"This is especially the case considering how much our allies have improved as well. The Crossers have undergone a rebirth after Patriarch Reginald advance to ace pilot and the Glory Seekers have finally started to receive substantial reinforcements from the Hexer colonies. We might even be able to field more mechs than expected at this rate."

"Meow."

"While everything is doing well, I can't help the feeling that I am missing one more crucial element. What have I overlooked?"

"Meow?"

As Ves looked up at the ceiling of his office, his body suddenly froze.

Though nothing appeared to have happened in the room, Ves had grown shocked!

The reason for his abnormal reaction was because he received a message from a source that had remained silent for several years!

Chapter 4170 Version 2.0

Much had changed in the years since the Golden Skull Alliance settled in Davute.

Every alliance partner had taken full advantage of the relative peace. The Larkinsons and their allies had reformed their organizations, expanded their fleets, obtained better mech models and built fantastic new mechs.

Though they also spent a lot of time on building up their planetary branches and their business operations if they had any, much of their preparations focused on strengthening the military power of their expeditionary fleet.

For each of them, the fleet that compromised all of their capital ships and the vast majority of their sub-capital ships remained the heart and soul of their organizations.

Despite the large and rapid expansion of the Davute Branch, Ves had no intention of turning it into the main stronghold and base of the Larkinson Clan.

At this point, the clan had done almost everything it could to prepare for the upcoming Trailblazer Expedition.

Though Ves could not predict what would happen once he and his clan embarked on this ambitious endeavor, he was certain that they would fight their fair share of battles!

As such, Ves paid increasingly more attention to strengthening his fleet and forces. This was why he supported the rapid spread of Hempkamp's deep exchange add-on to all of the Larkinson Clan's mechs.

With measures like these, Ves steadily crossed the items on his lengthy to-do list. It felt good to be able to finally reduce the number of topics he needed to address.

Yet as the LMC's mech catalog continued to grow larger and as his children grew from fragile little babies into energetic kids, he always felt as if he was missing something important.

He had been living in the absence of an element that played a large part in his life.

It was only after the Mech Designer System made itself heard once again that Ves fully remembered what set him on this path in the first place.

To be honest, after Ves had overcome his shock, he didn't quite know what to feel after the System's return from dormancy.

His initial reaction to this unannounced prompt was trepidation instead of elation.

Ves grew concerned about the Mech Designer System's reintroduction to his life.

Shortly before the System went into its awfully lengthy upgrade cycle, Ves had already been working on reducing his dependence on its convenient functions.

He did not deny that he had received a huge amount of help from it. He could not have become a second-class mech designer, a masterwork mech designer or even a Journeyman without the essential boosts and other

amenities it provided to him in the form of rewards for completing certain tasks!

Yet as much as Ves reveled in the goodies that he was able to earn from it, he never truly trusted it. Someone obviously made it, and he suspected that the purpose behind the Mech Designer System might not have his best interests in mind.

The fact that it was connected to the mythical Metal Scroll was also a problematic factor!

Though Ves had seen how a different fragment of the Metal Scroll managed to propel the Polymath all the way to the top of human civilization, he felt extremely reluctant to follow in the famed Star Designer's footsteps!

He did not know much about her, but he instinctively guessed that her dependence on that Metal Scroll fragment was still dangerously high!

What if someone robbed this piece from her one day? Would she lose so much power and ability that she was unable to perform at the level of a Star Designer anymore? Would she outright lose her life because she had made so much use of it that her life was literally bound to its existence?

Though some of the guesses sounded a bit too far-fetched to be true, Ves would rather be careful than complacent.

The System's long hiatus had changed Ves quite a bit, and mostly for the better in his opinion.

His inability to access the System's many useful functions had forced him to take a more honest and sober approach to his work.

Whenever he encountered a problem in his work that he couldn't solve with his own ability, he no longer thought about accessing the Skill Tree in order to exchange his Design Points to instantly gain the appropriate Skill or Sub-Skill.

Instead, he did what every other colleague did. He searched the right textbook or academic article and honestly studied the contents the old-fashioned way.

Though there was no doubt that he was losing a lot of time that he could have spent on furthering his research or designing more mechs, he did not mind the loss too much.

There was something honest and relaxing about learning through proper study.

Besides, he found out that his learning efficiency wasn't low at all. All of his augmentations, both spiritual and physical, had turned him into a frighteningly effective mech designer.

When it came to absorbing scientific knowledge, he had turned into the equivalent of a sponge!

Even if Gloriana was considerably more effective at book learning than himself, Ves made up for his relative shortcomings in other ways.

For example, Vulcan's exposure to a lot of mech designers and other professionals had granted him an extremely large repository of science and engineering know-how.

Since his incarnation had already mastered a scary amount of knowledge, Ves was able to lean on Vulcan's comprehension to quickly further his own understanding of a specific field!

It was through tricks like these that Ves rid himself of his habitual dependence on the System's most useful and helpful functions.

There was only one major feature that Ves still missed.

He felt quite annoyed that he had never been able to use the Superpublish function for several years in a row.

Since his chances to use it did not accumulate if he left it alone, Ves effectively missed several precious opportunities to upgrade a mech beyond his current ability and derive a lot of useful lessons from studying the comprehensive changes the System would have made to his work!

Of course, Ves clearly recognized that this frustration was yet another sign of how much of a dependence he built on an external tool. The sooner he got rid of this remaining impulse, the more he liberated himself from the trappings of the gift that had kickstarted his fantastic career.

"Why now?" Ves whispered in a tone that conveyed both his relief and apprehension. "Why come back after all of this time?"

Naturally, the System did not deign to answer his emotional question. It was busy with running its own operations in the background.

Though Ves had no clue what the System was doing or whether it even needed time to 'reboot' itself, he vaguely guessed that it was ramping itself back up after a long time of remaining silent.

Slowly but surely, Ves felt as if a major presence was emerging from a hidden location.

Even Lucky began to feel uncertain.

"Meow...?"

Just as Ves wanted to reassure his pet, his consciousness suddenly moved to a different place!

In one moment, he was leaning back on his chair in his office at the Royal Mansion in the Cat Nest.

In the next moment, his consciousness had been yanked to what appeared to be a different plane of existence, one where he was only present on a mental level!

"What the hell is this?!"

His voice seemed to echo throughout the boundless but empty space.

Soon enough, he felt as if the energy around him became more and more charged.

What was strange was that the energy felt a bit familiar to him. As he tried to extend his senses as best as possible, he realized that he had encountered it before.

"High-level metal energy!"

The reason why he was able to recognize it so quickly was because Vulcan still retained a minute amount of metal energy.

Compared to the speck of metal energy that Vulcan struggled to retain, the quantities that the Mech Designer System wielded was vastly more than Ves had ever encountered from a single source!

Not even Cassandra Breyer wielded as much metal energy than Ves sensed in the background!

This pretty much confirmed that the Mech Designer System was related to the Metal Scroll!

As the energies surging in the background finally stabilized, the darkness around him finally faded a bit as a single light source appeared in front of his 'position'.

A greyish ball of light took shape.

[Welcome to the System Space. The Mech Designer System has successfully updated to Version 2.0. Many changes have taken place, of which this new form of interaction is one of them. In response to your persistent need for secrecy and information control, the Mech Designer System has created this

discreet and secure space in order to allow you to access its functions in complete confidence.]

Ves mentally widened his eyes. "I never expected this level of customer service from you! So you are capable of listening to my demands! What else do you have in store, System?"

He had a feeling that this upgrade did not amount to a simple change in how he accessed its menu.

There was no way the System would have taken years before making itself heard again if this was the extent of its upgrade!

[As part of its upgrade process, the Mech Designer System is also ready to upgrade in a manner of your choosing.]

"Huh? What are you talking about?"

[With the Timpala Steel that you have provided, the Mech Designer System is capable of restoring a limited selection of additional functions. Since there is only a limited pool of resources available for upgrades, you must select the upgrade track to be applied. Once chosen, the Mech Designer System will permanently change in operation, closing out a number of features in order to better operate in its new capacity.]

"What..."

Ves grew confused. Just as he wanted to ask for clarification, the System had already moved on by presenting the possible upgrade tracks that he could select at this junction!

The gray ball stretched into a screen that displayed an event that took place in the past.

Figures such as Eloise Pelican, Axelar Streon and Rion Aaden briefly appeared in view as they piloted mechs during the time when Ves' consciousness temporarily stayed in their minds.

[Upgrade Track #1: Mental Projection. This upgrade trajectory will expand the Mech Designer System's ability to allow you to mentally project your consciousness in the minds of different individuals, most notably mech pilots. You will repeatedly be able to cast your presence to the minds of mech pilots in the past and present. When casting your mind back into the past, the passage of time to your present self is frozen, which effectively means that no time shall pass until your consciousness returns to the current time.]

"What?! Are you serious?!"

Though Ves had not immersed himself in any Master experiences recently, he still recalled how many benefits he derived from them. They weren't just opportunities to learn how mech pilots handled different mechs in different situations, they were also great ways for him to steer what took place in the past!

From what it sounded like, the System had most definitely picked up on his growing appreciation of what Mastery experiences could bring to Ves. There was nothing else in his life that could come close to reproducing this amazing feature!

What was even better for Ves was that the System had also noticed the reason why he had not used it as of late. He was too reluctant to put himself out of commission and completely defenseless for weeks at a time when his consciousness was merrily messing about in the past!

The Mech Designer System then started to project a different set of footage. It showed Ves interacting with and encouraging different expert pilots. Notable individuals such as Venerable Tusa Billingsley-Larkinson, Venerable Davia

Stark, Venerable Joshua Larkinson, Commander Casella Ingvar-Larkinson and Patriarch Reginald Cross all flashed by in his view.

[Upgrade Track #2: Mech Pilot Cultivation. This upgrade trajectory will strengthen the Mech Designer System's ability to facilitate the growth of mech pilots. You will gain multiple new options to improve their strength, repair their ailments and shortcomings and accelerate their individual progression. The Mech Designer System will allow you to physically and mentally improve mech pilots to a great extent while also binding them with unbreakable contracts that guarantees their discretion. Further on, you will be given the option to improve another individual's genetic aptitude.]

"...!"