

Chapter 28: Preparation

"What happened after that?" Ves asked over the comm as he rested on the couch. Lucky curiously tried to paw Melinda's head projected by the comm.

"The juggernaut blasted half the walls of the military base apart. It set up a panic in our team. Frankly, the only reason why we lasted so long after the juggernaut entered the field was because its pilot went drunk with power. He destroyed half his team with all the collateral damage he caused."

The two spoke about the performance of the Marc Antony, and how Melinda found it to be a good mech despite its many faults. "It doesn't have a good place on the front lines due to its scattered strengths. It's not quite a knight, not quite a striker and its pitiful launchers don't give the mech a lot of long-ranged firepower."

"Well, I'm only working with the tools I have. Frankly, if I could replace the mace and shield with something sturdier, I'm sure the mech would perform just as well as the Caesar Augustus."

"Sadly, that's not an option if I want to keep costs and complexity under control." Ves shook his head. "I've anticipated most of the issues you've mentioned, but they're kind of built into the fundamental design of the mech. I'm not aiming to replace the Caesar Augustus. I just want to deliver an affordable variant that can perform well in smaller engagements."

Melinda nodded. "I'm certainly impressed with the mech. I kind of want to replace my patrol mech with it, but I know the pencil pushers in the Guard won't allow such a thing. It doesn't have the endurance."

After the conversation ended, Ves put the finishing touches on his second handmade mech and sent it off to be sold in the market.

"Let's see my progress so far."

[Status]

Name: Ves Larkinson

Profession: Novice Mech Designer

Specializations: None

Design Points: 235

Attributes

Strength: 0.7

Dexterity: 0.7

Endurance: 0.6

Intelligence: 1.2

Creativity: 1

Concentration: 1.2

Neural Aptitude: F

Skills

[Assembly]: Apprentice - [3D Printer Proficiency I] [Assembler Proficiency I]

[Business]: Apprentice

[Computer Science]: Incompetent

[Electrical Engineering]: Novice

[Mathematics]: Incompetent

[Mechanics]: Apprentice - [Jury Rigging I] [Speed Tuning I]

[Metallurgy]: Apprentice

[Metaphysics]: Incompetent

[Physics]: Novice - [Lightweight Armor Optimization I] [Mediumweight Armor Optimization I]

Evaluation: Almost reached the standards of an apprentice mech designer.

His stats hadn't changed much since the last time he viewed it. His concentration had gained 0.1 points again due to his single-minded focus in mastering the Marc Antony. Besides sleeping, eating, bathroom rituals and taking short breaks to reset his mood, he spent all his time fabricating the Marc Antony.

His DP counter remained stubbornly stagnant, further indicating that the sales potential for his Fantasia variants had reached the bottom of the well. Much of his DP came from the two Marc Antony's sold so far. They offered much more for a single sale due to their higher value.

"It doesn't look like my Marc Antony model will catch fire." Ves noted disappointingly. "With only a little more than a week left until the YTE, I won't be able to increase my sub-skills or attributes in any meaningful way."

While he spent a lot of work designing the Marc Antony then mastering its fabrication process, the things he learned provided marginal help at best when joining the contest.

The contest only lasted one day, just long enough for mech designers to showcase their skills without boring the audience to a multi-day engineering fest. The day before the main event, the organizers hosted a qualifying round in order to filter out the eight best contestants.

Both events revolved around designing and putting together a functioning mech out of a bunch of parts and a random stripped-down model. It showcased the mech designer's skill in creating new mechs while skipping out the boring part of fabricating the parts from scratch.

The old Ves without the System probably wouldn't get past the qualifiers. Even with all the additional benefits the System gave him, he might not even be certain he can reach the top 3.

"I shouldn't be obsessed with trying to reach first place. I have to keep my priorities clear. As long as I can find a single customer for my Marc Antony design, I've already won."

The impending interest payment term loomed within a month, which caused Ves to bear immense pressure.

"I stand a much better chance in the contest if I can earn enough DP to buy the Jury Rigging II sub-skill before it starts."

He already experienced the power of Jury Rigging I. The skill energized with his creativity, allowing him to form unorthodox solutions to complicated technical problems. It did not add any new knowledge, but instead improved his ability to combine the knowledge he already learned into something new. An example would be to strip a laser rifle and turn it onto a shoulder mount. Though such a shoddy modification won't work as well as a purpose-built shoulder weapon, it should work well enough in an emergency.

"I should get my workshop ready." Ves reminded himself. If all went well, he should be able to find a customer for his new design. He'd have to get his workshop ready and running by the time he got back from the event.

First he took a look at his 3D printer. As a fairly old, second-hand model, it lacked the most current technology in fabrication. Ves meticulously went through the settings of the printer, and with the help of his improved knowledge in assembly, added presets that helped fabricate certain parts easier and with less errors.

Then, he looked at his inventory. Besides the raw materials required to produce the HRF armor plating, he lacked pretty much everything else

required to build up a Marc Antony. Ves took note of the list of raw materials and visited the local site of the Mech Trade Association. The MTA offered many services to anyone looking to build, buy or sell a mech. It conveniently partnered with resource wholesalers that allowed them to sell various raw materials through a convenient market interface.

"Hm, to fabricate the HRF requires about 11 million bright credits in raw materials. To purchase the rest of the materials requires just 7 million credits. The total cost comes at 18 million credits. If I charge 24 million credits for the Marc Antony, I'll recoup my cost and earn just enough profit to meet my next interest payment."

Selling a mech that priced at 24 million credits was much easier than one that demanded more than double the amount. It cost 45 million credits in total to cover the raw materials for the Caesar Augustus. The materials for the Augustus' proprietary armor plating cost 38 million credits alone, and Ves lacked the facilities required to process exotic materials into advanced armor plating.

"These prices look reliable, but it's not entirely reflective of the entire market." Ves noted carefully, remembering what he learned in college about running a business. "I'm sure there's plenty of private agreements between a small group of partners that offers substantially lower prices."

Ves curiously inspected the market prices for the Caesar Augustus and its close variants. The official base model produced by National Aeromotives sold for a whopping 65 million credits. Naturally, as the original manufacturer and with the now mature Jason Kozlowski at the helm, the CA-1 produced by NA was top quality.

The few mech designers that have licensed the Caesar Augustus sold the base model or its close variants for around 55 to 60 million credits. Perhaps they also offered lower prices, though they used private sales channels in

order to conduct such business. The MTA's internal market site only listed public offerings, which in the mech business is considered the tip of the iceberg.

"As a tiny mech designer with a one-man business with no reputation, I don't possess the qualifications to seek out deals that are more favorable to me. I can only purchase the materials I require at market prices."

This presented a big problem to Ves. The materials needed to build up the frame, power reactor, engines and everything else amounted to 7 million, which is 2 million more than he owed in his upcoming interest payment. As Ves had no ability to draw another loan, he had no way of purchasing the required materials without receiving an advance payment from a customer.

"That's also going to be a little tricky."

The private mech business used to be pretty chaotic.

Customers sometimes refused to pay up, leaving the manufacturer in the hole. Sometimes the customer paid on time, but used the new mech they acquired to extort the manufacturer into returning the money.

Sometimes, manufacturers also screwed their customers in return. They used sub-standard materials and inferior components to fool their customers into believing they paid for quality when instead they got nothing but a fake.

The establishment of the trans-galactic MTA curtailed most instances of fraud and robbery. Customers looking to buy a reliable mech used the MTA as a middleman. The MTA certified each mech that passed through their hands, and made sure the mech conformed to the submitted and agreed upon design between the seller and buyer.

Mech designers and manufacturers also benefited from the MTA. For the cost of 1% of a mech's sales price, they could take advantage of its many services, such as certification, access to the internal market, to letting them take care of

collecting payment from the buyer. It provided a safe platform to do business for many small and medium-sized businesses.

The MTA, though officially a charity, also acted as enforcers. They rigidly enforced the prohibitions on installing weapons of mass destruction onto mechs. Any violators caught with dabbling in forbidden dangers like nukes or viruses would be squashed by the MTA's dreaded 'Compliance Department'. Each so-called compliant officer who worked for the MTA were at least expert pilots, with most captains reaching the standard of ace pilots.

In comparison, Melinda only reached the standard of advanced pilot, which was the minimum skill requirement to receive a piloting position in the Mech Corps.

"If I do my business through the MTA, I won't need to worry about the authenticity of the advance payment. My customers will also receive some assurance from the organisation."

Though Ves had not yet bought anything from the market, he pre-registered his purchase list in order to notify the sellers of those materials that he might buy them soon. It was nothing more than a notification, but the sellers might prepare for the sale by making sure they had the materials in their inventory and could ship them to the Bright Republic.

"The Bright Republic is small, so shipping times aren't so bad as long as I can find each material in the domestic market."

Ves tracked down each material and was relieved there were no problems on that end. With the ultra-fast shipping capabilities of a modern galactic civilization, shipping companies were able to transport all the materials stockpiled in Bentheim to Cloudy Curtain in just two days.

After that, he contacted the MTA to prepare the paperwork for his expected production. Once he signed some standard contracts and agreements with

the MTA and the Bright Republic, a representative of the MTA called him in person. The representative invited Ves to go over the legal requirements of producing a mech in the Bright Republic.

"Your production license covers the permission to produce the weapons that come with the Caesar Augustus." A representative from Bentheim explained over the comm. "However, you do not have permission to live-fire these weapons even in tests. Furthermore, you are not allowed to produce your own ordnance. This means you may not produce any missiles even if you have the capability to do so from your license."

"What about the wrist-mounted laser cannons? They're technically operational as soon as they come off the 3D Printer. I just need to plug them to an energy source."

The representative swiped a couple of designs to Ves. "You need to add safeties during the fabrication process that seals the energy weapons. The files I just sent are small presets for your 3D printer. They will automatically incorporate the most optimal safeties to any weapons you produce, but you should always double-check them manually."

"Will do. I have one final question. Could you tell me if my design has any appeal to the market?"

The man from the association smiled. "We are always ready to offer advice to young entrepreneurs. As for your variant, it is highly unusual to offer an economy variant of an extremely advanced frame such as the Caesar Augustus. The Augustus already has a small demand. Since you have replaced its armor in your design, thus taking away the biggest merit of that particular model, I cannot be certain whether any potentate is willing to invest in your new concept. There is no existing demand for this kind of product, so you should diligently work on your marketing in order to create demand."

"Understood. I don't have anymore questions, so goodbye."

"Have a nice day."

In other words, Ves had to market his design from the ground up. He couldn't steal any customers from the pilots interested in the base model because they were unwilling to buy an inferior version when they had the money for the real thing.

Ves should target pilots with less generous bank accounts, but those pilots usually bought dependable front line models, not discounted advanced mechs. These two categories differed significantly in terms of endurance, maintenance cost and overall longevity. Regular front line mechs were built to last.

"I'll cross that bridge when I get there."

For the remainder of the time, Ves kept diligently producing the Marc Antony in his virtual workshop. He accumulated a decent amount of experience in fabricating the most troublesome parts, and with his deep knowledge of the frame and its base model he felt confident he could fabricate a functioning mech with his own equipment.

The days passed quickly. The day of departure arrived. The Bright Republic offered free transportation to Bentheim for all contestants. As a one of many participants to the annual Young Tigers Exhibition, Ves joined the crowd of hopeful pilots at the spaceport while holding Lucky to his chest and leading a floating luggage carrier carrying his clothes and other stuff.

"Man, I don't know why I'm even coming. Only Grant has a shot of reaching the top 10." A young graduate complained.

"What do you know?" A tall and heavysset pilot said with a sneer. "If you manage to reach the top 200, you'll easily be able to land a job at a reputable

mercenary corps. I'm not talking about the 5 or 10 man shows, I'm talking about the real deal, like Pritchard's Bannermen or the Red Bishops."

"Seriously? No wonder my uncle wanted me to participate."

"The YTE not only showcases our generation's talent to the Republic, it also acts as a job fair. Plenty of employers are watching the show. If they like a pilot, they don't hesitate to offer a contract. My brother landed a spot with the Crossmen that way."

The idle chatter of the potentates unintentionally revealed many useful things to Ves. Besides the government and the Mech Corps, he could also expect a lot of mercenaries to attend. Their main purpose was to look for fresh blood to replenish their ranks. It was questionable whether they'd be open to buy a new mech. Ves had his work cut out for him in the next couple of days.