I set down a large cup of coffee on my workstation, sitting at my computer with a huff. While my first instinct was to dive right in and start designing stuff, I knew I would regret not having some sort of plan. So, after giving it some thought, I started a list.

By the time it was done, the list was composed of everything I wanted to get out of my head from the Titanfall universe. When I was sure I had everything I wanted, I broke the list up into two groups, and then ordered the contents of those groups from least important to most important. I deliberately ignored the fact that I *definitely* didn't have enough time to get to everything. I would just have to be satisfied with getting to what I could, working down to the wire.

The first list was stuff I wanted blueprints of but that I didn't need to build. These ranged from toilets, all the way to compact stove systems and combustion engines that could run on damn near anything flammable. I had an entire civilization's worth of advanced technology stuck in my head, and I was damned if I would let the opportunity pass me by to pad out what I could build on my own.

Everything on the blueprint-only list was stuff already below my level of understanding, meaning I could technically re-create on my own if I felt like it. But, since I had their blueprints already in my head, I could copy them down at record speed and store them for later. I tested the theory, copying the design for a self-contained, self-cleaning toilet from my head to the computer in ten minutes. I then proved it wasn't a fluke by doing the same to the aforementioned super-efficient engine in twenty. I understood both of the designs perfectly, and while I didn't get the burst of knowledge that would fill in the tech tree, knowing that I would never need to buy a toilet again was kind of worth it. When this tech tree faded, the blueprints would remain, but I wouldn't have the perfect, complete understanding of the designs and all adjacent designs.

I spent eight hours flying through several dozen simple designs, recreating blueprints for civilian tech that were useful and either on par with or more advanced than what this world had access to. This included a lot of the self-contained colony equipment that IMC specialized in producing and spreading around. Part of me wished I could have spent longer, but there was too much higher-end stuff that I needed to crack. This was more about self-sufficiency than it was about advancing my knowledge.

The second list, which *was* about advancing my knowledge, contained all the tech I wanted to design *and* build. This list was filled with some of the Titanfall universe's most advanced and most interesting tech. First up on the list was their shield tech, and the last thing on the list was their FTL systems. The Jump Drives were pretty advanced, so much so that the tech tree wasn't even letting me peek at what was under the hood. It was extremely unlikely that I would get to make even the smallest Jump Drive IMC made, especially since I would need to figure out or stumble on whatever pre-requisite tech unlocked it.

For now, I needed to focus on more reasonable and, at the moment, more useful designs, starting with cracking the shield systems. They called it a particle shield, and the

method they used was... confusing at first. It wasn't until three hours later, when I had completed the design, that I really understood what was happening.

At first, I assumed that the particle shield was named after its ability to stop physical materials, i.e., particles. After a while, I realized that it was describing how the shield functioned instead. The shield emitter, built from some rather exotic materials, projected a field that interacts with light, specifically photons, traveling in a specific direction, namely away from the person using the shield. The field forces the passing photons to release their energy as they pass through it. As the energy is released, it almost immediately dissipates, but it's split-second existence is so energetic that incoming objects treat it as a solid barrier.

Since the photoreactive field is angled to only catch light traveling *away* from the user, the barrier follows the same pattern, meaning the user can shoot through their own shield, and depending on how advanced the system is, it may even *increase* the effectiveness of their shots, further accelerating their bullets. Once the photons release their energy, the remaining light wave scatters into harmless visual light, generating the blue or orange glow that the shields gave off.

It is an absolutely insane process, one that is only made possible by a specific type of crystal, which grew in orbit of specific gas giants in the Titanfall universe. This crystal was gathered as an extremely fine powder and mixed in an electrically conductive gel, which was then locked inside small packets. Radiation was passed through the gel, usually X-ray radiation, while simultaneously, a current was passed through it, which activated the field. The shape of the packets is what defined the often hexagonal design of the particle shield.

Making my first particle shield emitter was a three-step process. First, I needed to make a generator for the fine crystal powder, often called photon sand. It was very much *not* naturally occurring in this universe, which was good because it meant I was the only source of it on the planet. Thankfully, the process to make it was even more simple than the Elerium since it didn't require a seeding crystal, just a batch of chemicals mixing in a specific vessel. The crystals formed in the gas chamber above the mixing vessel, where they fell to the surface of the liquid and were then skimmed off the top and dried.

I would also need to make the gel mixer. A specific machine was required to suspend the photon sand inside the gel properly and solidify it enough to be usable. It was a small machine, at least the version that I was making was. The final step of the process was putting it all together, building the particle shield emitter itself.

I spent the next four hours designing everything I needed and getting the molly-makers going on producing all of the parts before starting to shift over to a new project. I would need some specific chemicals to start the photon sand generation and a few more for the gel process, which meant a trip to the city. I made a note to ask Jackie if he could recommend some people

to help run errands for me, because I was not looking forward to running in and out of the city to buy stuff, and I was not ready to start getting things delivered here quite yet.

Thankfully, my second project was a big step in the direction of securing and feeling confident about living out here. However, before I could get it started, Jackie arrived with the shipping truck full of furniture and other household stuff. I was waiting for him as he arrived, honking the horn of the large truck as he passed, pulling forward past the garage to turn back around. Kaytlyn walked up as I was watching him drive.

"How did the trailers look?" I asked, looking over at her just in time to catch her rolling her eyes.

"Jeez, guess I should have guessed you didn't hear me," She said, shaking her head, though she didn't actually appear to be upset. "I finished looking through them hours ago, Jackson. Four of them are livable right now, with power and running water, though it's from a well so I wouldn't try drinking it. Some of the others might be salvageable, but most aren't worth the time."

"Well... you're welcome to claim one for yourself," I said before realizing I hadn't actually asked if she was going to live out here, just suggested it. "Uh, that is assuming you're going to live out here?"

"Can't exactly be a bodyguard if I'm too far away to do anything half the time," She responded. "You gonna charge me rent?"

"No, consider it part of the package," I responded with a smirk. "What have you been doing for the last few hours if you were checking the trailers?"

"I did a few drives around the town to see if there was anything important around," She explained. "I also spent some time on that."

She gestured to the old liquor store, the tallest building in town, though not by much. On its roof was a cobbled-together guard post, complete with recycled roofing cover, some barriers, and what looked like a couch. There was probably more, but I couldn't see it from my current angle. A MRVN unit was welding some support braces, and I could see some salvaged ladders newly welded to the side of the building.

"Ah. Not bad, I'll build you something better eventually," I said with a nod. "That building will be the security hub for the town, I guess."

"What are you gonna do with the booze?"

"Send it back with Jackie," I said with a shrug. "His mom might be interested, and if she isn't, I'll bet he knows someone who will buy it."

Jackie finally pulled back around and stopped in front of us, jumping out of the truck. Together with the help of some MRVNs, we got everything into the two trailer homes. Apparently, they had started clearing the good ones out after Kaytlyn finished her inspection. They were still a bit bare bones when we were done, but they each had a decent computer for watching whatever junk was on the internet, a small couch, and a good-sized bed. I also had a small cot installed in the garage, so I had a place to sleep there.

The MRVNs also unloaded some extra parts and materials, stuff I knew I would need, that I couldn't get from grinding down scrap in the mass recycler. When the truck was empty, I made the offer to Jackie.

"The beer will be bad, but sure choom, Mama Welles would love to get first dibs," He responded as we stepped into the liquor store. "How much do you want for it?"

"Bare minimum Jackie, I'm not gonna drag out extra ennies from your mom," I said. "Take it all, give her whatever she wants, sell the rest."

"Thanks, Choom," He said, thumping my shoulder, "You should expect to get invited over for dinner after this."

We loaded the truck back up with booze, the MRVNs making quick work of it, even if only two of them were helping us while Samwise and the other two did their own work. While that was going on, Jackie grabbed a bottle of something, and we headed back to the garage to have a drink.

"So, someone reached out to Padre, wondering why we were active in the area," Jackie said, pouring all three of us shots of what looked like tequila. "Badlands fixer by the name of Dakota Smith. Padre explained the basics, nothing more than what she would learn by watching the town for a few days. He explained that you work with him, and he considers you under his protection, but you don't consider yourself a member of his flock. She requested a meeting."

"Damn... was hoping for a few more days..." I responded, grabbing the shot from the table. "Dakota, what's she like?"

"She's a nomad static," Kaytlyn responded, both Jackie and I turning to look at her. "A member of the Aldecaldos who doesn't travel with them, instead she stays at one place to act as a contact point, an in between and a local resource. I've done a few deals with her, mostly guarding transports."

"Should I expect a tax? Is she gonna try and strong-arm me?" I asked with a frown before taking the shot as Jackie and Kaytlyn did. He poured himself and Kaytlyn one, but I flipped my glass over, so he skipped me. "What would happen if I ignored her?"

"Nothing directly, but she won't think twice about passing on jobs involving you," Kaytlyn explained.

"It's the same rules as Padre, choom," Jackie added. "If she likes you, she will work to keep you safe. You piss her off, she'll pass on a job stealing from you with a smile."

"So I gotta make it worth her while... Dammit. Alright, I'll think of something."

"If she wasn't a techie herself, I would say you should offer to fix stuff for her," Kaytlyn said with a frown.

"I'll think of something," I repeated, shaking my head. "How long do I have?"

"As long as you want, just gonna make it harder for her to like you if you make her wait," Kaytlyn pointed out, swallowing her second shot, tipping her glass upside down on the table near mine. "A couple of days should be fine, especially if you come bearing gifts."

"Alright, two days from now, think you could pass that along, Jackie?" I asked, getting a nod in return.

"Sure thing, Jay. I'll let Padre know. He knows how to contact her," He responded. "Who knows, maybe she'll have more work for us."

"Speaking of work, how long until I meet this borg friend of yours?" Kaytlyn asked. "If we are gonna be working together, I'd like to meet him first."

"Soon, he's a bit busy, but he'll be moving out here too," I said, giving Jackie a look. "It will be fine, he is easy to work with."

In truth, I did have a plan for that. Which was good because my armor was actually only a few feet away, stored inside a crate. In all honesty, hiding behind the fake borg disguise didn't seem nearly as important as it had originally. It had been an on-the-spot thing that Jackie thought up, and I had gone along with it because I was desperate for every layer of protection I could manage to wrap around myself. Now, though, it was just kind of getting in the way.

It would, however, make the perfect cover for someone else.

We continued to chat for a while longer before we split up. Jackie needed to get back to the city to do something with all the booze, and I had work to do. By the time I made it back to my workshop, I had about four hours left before I should sleep, so I quickly pulled up the CAD software and got started. It took five hours to finish the design, and I crashed on the cot that Jackie brought, sleeping in the side room while Samwise worked on getting the parts for my latest design printed out.

When I completed the first MRVN, which would go on to become Samwise after a complete rehauling of his AI, I got a huge download of robotic designs. Most of those designs were simple modifications, switching out limbs for more specific tools or appendages designed for specific tasks.

It also opened up a plethora of options for more advanced robot frames further along the tree. The one I was most interested in at the moment was the base IMC combat model, called the <u>BRD-01 Automated Infantry</u>, or Specters. They were the robotic version of grunts in the game, basically filling the battlefield with minions and mobs for the pilot players to kill for fun and points. In reality, the BRD-01 was actually a pretty impressive infantry unit, and while it didn't have an AI, it was capable of reacting to quickly changing variables and coming out on top. It wouldn't stand a chance against an Edgerunner or a Borg, but against normie Wraiths it would clean up.

Besides, building the specters was just a stepping stone. What I was really after was further into the robotic combatant's tree.

I woke up the next morning, the fourth to last day with the Titanfall tech tree, and immediately got to work assembling the Specter. Samwise had managed to get everything printed out, and spent time making a proper drone working rig, which ended up looking a lot like the <u>power armor workstations</u> from Fallout. By working together, we assembled the non-AI robot in record time, instructing the Specter to stand in the corner of the garage, locked up and ready to show to Kaytlyn whenever she woke up.

The flood of information I got from completing the Specter was similar to what I got after completing my first MRVN. It was a large download, and I was starting to think that developing more complicated things would lead to an even larger "space" around the tech tree being given to me for free. When the rush of knowledge was over, I knew how to make several specter variations, including their modified programming.

Completing the Specter also gave me access to more advanced combat robots, including my real goal, the <u>Mk.6 Automated Law Enforcement Officer</u>.

I was not familiar with their origin, but they were essentially robot pilots and sheriffs for the IMC colonies. While I wasn't looking for the western sheriff style getup that the design seemed to suggest, I could change that out easily. The frame was pretty advanced stuff, and was pound-for-pound superior to the Specter units in every way, a few times over. They had an advanced AI, something similar to Samwise's design, but combat-focused.

With some modifications to their AI, one of them would make an excellent leader of a group of Specters.

I knew there was also a design for robot frames called Simulacra, but they were literally just sleeves for download pilots. Their bodies were on par with the Mk.6, but required me to develop several extra bits for scanning and digitally copying someone's mind. It didn't require anything drastic since the original person wasn't affected negatively or anything, but the concept still left me feeling uncomfortable. The idea of locking a human consciousness inside a robotic shell sounded horrific, and I already knew how to make AI just as, if not more, proficient in combat and piloting.

While I'm sure Arasaka would be frothing at the mouth to get their hands on the Simulacra scanning tech, I was going to skip it for now.

After a bit of consideration, I got to work on the Mk.6 design, powering through the significantly advanced systems and blueprints. Another reason I was going with the Mk.6 was their jump jet rig, one powerful enough to move a heavier robot. I was hoping that its design was advanced enough that it would also unlock all of, or even just some of, the other jump jets I had access to.

I finally finished their design at two in the afternoon, and while Samwise immediately started getting the parts ready, I began working on their AI core. The first version, which would stay off, was, unsurprising considering its name, less a soldier and more of a police officer capable of open combat. Thankfully, with all of my accrued knowledge of AI design, that was well within my skill set to fix and even improve that.

We finished stage one, the original version of the Mk.6 ALEO, at around 10 p.m. The wash of information I gained was impressive and included all former versions of the ALEO, as well as several variations of its final version. I also got a full download of both the IMC and Frontier Militias jump jets. I cheered loudly in my workshop when I realized I could now make a dozen different models of the franchise's mainstay tech.

When the flow of info stopped, and I was done celebrating, we got right back to work. I was not satisfied with the ALEO AI, but thankfully, I knew how to fix that. At around four AM, I finally went to sleep, my first version of the Mk.6 was sitting in the garage, waiting to be turned on, while Samwise was getting to work on its brother.

When I woke up the next morning, I took a few minutes to walk around the town. I had been working nonstop, and while I desperately wanted to get back and finish what I was working on, I still recognized the need to not drive myself into the ground. Part of me was already looking forward to the next week, when I could finally relax a bit and let Samwise and the MRVNs pick up a lot of the work.

Speaking of him, my wonderful AI assistant and his siblings had already been hard at work. Since I had already gotten the benefit of building the first MK.6, there was no reason for me to be involved with building the second, even if it was a slightly modified version. All he needed were the plans for the modifications, which I had completed before going to bed.

By the time I stepped back into the garage, we had two Mk.6 ALEOs completed. One was basically stock, save their AI, which was specifically tuned to work as a sort of commander and soldier. He would have several specters under his command, and his main priority would be securing my property.

While our first ALEO was built to work with a group, his brother was built as a frontline fighter, a brute, and a combat expert who could work with a team or alone. To that end, my

warden armor was already attached to their frame, slightly modified, and directly bolted to them. It could be removed for maintenance, but I had specifically designed his programming to anticipate and work with the heavier armor. He even had an improved jump kit to counter the extra weight.

The idea was that the armor would allow him to pretend that he was a Borg, letting him travel with us and interact with people a bit more freely. His siblings were rarely ever going to leave the compound, so they could relax a bit more.

The armor would also make him significantly stronger since his own artificial musculature would work with the built-in enhancements of the armor.

When everything was ready, I activated both of the robots, their lights and sensors ticking on, one after the other.

"Greetings, Sir," The first model said, standing up straight, the servos that made up his legs shifting as he did. "What is my assignment?"

"Your assignment, both of your assignments, for now, is to familiarize yourself with our situation and the world," I explained, gesturing to Samwise. "Samwise here can help you with that, and can explain how to access the internet through one of the many computers here at the compound."

"Thank you, Sir," The same unit said, his sibling still silent, though they did nod in what I was pretty sure was agreement. "We will spend some time learning local intelligence. Will you be free to answer questions after?"

"Of course. Time will be a bit short for the next few days, but I will always try and make time for you guys."

They both nodded, and Samwise led them away, the older brother leaning under the door as they stepped into the side room. I was beginning to realize, between creating these two and Samwise, that the moment you turn on a new AI, you weren't really meeting them for the first time. I could have predicted what both of them were going to say, verbatim, since I had programmed them from the ground up. It was after they started reading new information and learning on their own, like Samwise first did after I finished making him, that you really met them.

Leaving them to their own devices for now, I made my way over to my workstation, settling down for another day of rushed designing and building. I had three days left with this tech tree, and there was still so much I wanted to work on. I was just starting to gert to my next project when Samwise stepped out of the side room, the door sealing behind him,

"How are they doing?" I asked, spinning to face him. "Any issues?"

"They are currently surfing the web, learning about the world," He explained, his shoulder mimicking a shrug. "They seem to be in fine working order, Sir."

"That's good. You want to take a break or maybe do something on your own?" I asked. "You've been working nonstop since we moved here."

"That is incorrect. I have taken several breaks to communicate with my younger brothers and to recharge," He explained. "I have four hours of charge left before I must do so again."

"Right... well, let me know if you want some time to explore the town or work on your own project," I repeated, knowing that no AI would really enjoy a "break" in the same way a human would.

"I will do so, Sir. For now, I must check up on the MRVN units to ensure they are working correctly," He responded, his screen flashing with a thumbs up.

"Alright, Sam, good luck."

He nodded, before leaving out through the open garage door, disappearing out of sight. I couldn't help but smile, before turning back to my computer, the design software already opened. According to Jackie, we had an appointment with Dakota Smith later that night, which meant I needed to get started on their gift. Once again, the colonist tech of the IMC came through as I brainstormed ideas.

At first, I considered a water filtration system, one that would let a nomad group filter even the most tainted water sources into potable water. The Titanfall universe had dozens of units like that, and some of them would be very impressive for my old world. But in the cyberpunk universe they weren't really all that special. There were only so many ways to purify water, and once you nailed those down, advancements came pretty slowly.

Besides, from what I understood, impure water wasn't the major problem that nomads faced. It was *finding* water. Water was a commodity, which meant all its sources were already owned by corporations. So, giving them a nice filter wouldn't really help much beyond making their lives a bit easier.

I was gonna solve their water problem completely.

I quickly got to work, putting together a deceptively advanced design specifically made by the IMC to allow people to live on desert worlds. By the time I was done, I decided to have Samwise print out the parts for the machine while we were gone, so I could make one when we got back. Not having to worry about buying water would come in really handy, and the tech was advanced enough that I was interested in what other uses it could have. When the design was completed, I put it into a shard for easy transport. I was just pulling it out of the computer when both of my newest AIs came out of the side room.

"Hey guys, perfect timing. I just finished with one project, and Jackie won't be here to pick us up for a few hours," I said with a smile. "Why don't I go snag Samwise, and we can sit down and talk for a bit."

"We would appreciate that, Sir," The more standard ALEO model said with a nod. "We have a few questions."

"Great, just give me a second, and I'll be right back," I said, patting them on the shoulders despite one of them being a good bit taller than me.

I left the garage and quickly found Samwise, who was directing the MRVN units, as they tore down one of the wrecked trailer houses. When I explained what was up, he happily gave them a few more orders before following after me, going back to the garage and back to his waiting siblings.