

We spent a while cooing and awwing at the tiny little puppy, who woke up not long after we moved him and began to squirm and chirp again. Unfortunately, while I wasn't crammed with plans, I did have two tasks I needed to get done before the day was over. As much as I wanted to hang out and watch the puppy roll around, I had work to do.

First up was to redesign, upgrade, compile, maximize, and "modernize" a set of MJOLNIR armor for people to use. I had a few hurdles I needed to overcome in that task, not the least of which was that the design needed to be variable in strength, since not everyone would receive the same enhancements. On top of that, some of the people using the armor were mechanical and would need to be measured by a whole different metric.

The second task was to design a new standard combat unit, something we could replace the shades with. I would keep heavies for now, but I was seriously looking forward to getting some competent soldiers on our side. The shades were a stopgap that I wanted gone.

Seeing as my first task included catering to different levels of enhancement, my first stop was to head down to the bio-lab to talk to Frank about what sort of strength levels we were talking about.

When I made my way back down to the lab, Frank had already cleaned up from the artificial birthing process, and seemed well on the way to preparing the process to make three siblings for our new canine mascot, as I had asked. When he spotted me entering the lab, he looked up, a smiley face flashing on the tablet on his chest.

"Welcome back, Jackson," He said. "What can I do for you?"

"I'd like an update on your work integrating the UNSC enhancements with Fallout and Cyberpunk tech," I asked, looking over what he was doing.

"Ah, Project Tulip," He stated with a nod, pausing to explain when I gave him a questioning look. "The Spartan enhancement projects were all titled with flower names, it seemed only right to continue the tradition."

"Not sure that 'following tradition' is important, considering the projects included horrific acts upon children, but whatever," I responded, shaking my head. "How is Project Tulip coming along?"

"Rather well, Jackson," he responded with a nod. "Our first stage, creating a baseline enhancement regimen that is as non-invasive as possible while still bringing the participants up to the level of the Spartan, has already been completed. The process consists of three minor implants and several dozen injections over a five-day period. I predict a single week of low activity recovery time after that is complete."

"That's pretty remarkable," I said, nodding along to his words. "How did you do that so fast?"

"Most of the work was already done with the original Project Orchid," he admitted. "It was already a remarkably low-impact process. I am simply filling the larger adjustments with a few pieces of Institute technology."

"And what about the development of the next stages? The process of making someone stronger than a Spartan?" I asked, raising an eyebrow. "Any luck there?"

"Some." He responded with a nod. "I believe the key to the process relies on one of the older Courser enhancements. It was a solution applied during the growth stage, but I believe I have modified it to work as an injection after the muscles have fully grown. I am also working on several other enhancements to raise that even further. I am certain I can finish the project within two days with four levels of enhancement and invasiveness."

"Fantastic. Any data you have on that would be appreciated."

He nodded, and a few minutes later, I was walking to my own workshop with a tablet containing a copy of Frank's work and notes. As I sat down at my computer, I began to scan through it, absorbing his data. From what I was reading, he seemed remarkably close to the end of the h project, and his prediction of two days seemed to be overkill for me. At this point, his process was mostly about refinement, maximizing results, and smoothing out any issues that presented themselves.

Don't get me wrong, I wasn't about to demand he speed up the project to get it done sooner, but I had all the information I needed.

As Frank had said, he settled on four levels of enhancement. One was the least invasive and brought someone up to the level of Spartan IV with several injections and a few minor implants. The last version was to build a fully augmented courser frame from the ground up, modifying it with the complete Spartan workup, before slapping in a dozen extra implants and augmentations from Fallout and Cyberpunk. The individual would then undergo a full brain resleeving, something both Cyberpunk and Fallout were technically capable of, though it was far from a simple process.

After reading about the brain transplant option, I messaged Frank and told him to focus on his first three options and finish the fourth later. I was almost positive no one we knew would accept the third option, never mind a complete re-sleeve.

Regardless, I knew I had the information I needed to start work on our new armor, so I pulled up the plans for several versions of the undersuit and got to work.

The easiest solution to the variable level of enhancements was to create variable levels of the suit, making sure they all matched Frank's projected strength levels. On top of that, I needed to make the suits in variable sizes, as the first enhancement only had a minor increase in height, while the higher levels would have increasingly significant changes.

I started by pulling apart several designs for the undersuit, strengthening things, reworking alloys, and adding several new additions to the suit's exterior. I had access to various

alloys from the Titanfall universe, and a few bits of SCIENCE!, which provided several replacements that increased its flexibility while also decreasing its weight. I also maximized its storage capacity so that, if a Smart AI were ever needed to settle into the armor, it would have plenty of computing power.

For a few hours, I tinkered and twisted at it, undersuit, switching out metals and polymers. In the end, by the time I was done, I managed to increase its resistance to rapid temperature changes by quite a bit, while also boosting its impact resistance, making it marginally more bulletproof.

I also managed to crack how to make the other iterations significantly stronger. First, I could flat out increase the number of capillaries filled with polymerized LiNb, which would provide a slight boost in strength. On top of that, literally in this case, I could add a second layer of material for more of the capillaries to be built into.

This secondary layer would have a lot of restrictions to keep flexibility and dexterity as high as possible, but there was enough space to add a significant amount of capillaries. By increasing the amount between two levels, I could adjust for the remaining levels of enhancement. As a bonus, because of how compact the layering was in the suit, made by carefully sealing many of the layers together, it barely changed the bulkiness of the suit, and made it more protective.

The only time that added protection would come into play was when the suit was significantly damaged, but at that point, the person was already in trouble, so a little added damage resistance could only be a good thing.

The rest of the suit came together in much the same way as the original. The new materials were barely noticeable, changing the normal black outer skin to a [dark gunmetal grey](#).

With the design of the inner suit complete, it was time to start really deviating from the design. While the base, [Master Chief MJOLNIR armor](#) was more than a little iconic, I was not satisfied with the base design.

First, there were several bits of tech that I wanted to work in from various models. EMP protection, anti-ECM systems, advanced communication platforms, and more. I wanted to work as many of these as I could into the armor plating, while also working to keep things compact, and without compromising the level of protection.

Basically, I wanted to make a set of MJOLNIR armor that did it all, or as much as I could get it to do, rather than the specialization that the UNSC seemed somewhat obsessed with. Thankfully, since cost was no object with me, I had a pretty significant advantage.

As I was designing the exterior plating, I did my absolute best to keep everything flat and sleek, compressing and using every scrap of material science and miniaturization to avoid bulky armor sections. While the UNSC might have been happy with clunky arm pauldrons and strange, nonsensical chest plates, I knew how much they could hamper a soldier, especially when fighting indoors.

It was a miracle that some of the UNSC armor I knew how to make could even move around, given how bulky they were. There was only so much I could do, of course, so there was *some* bulk, but I did my [best to keep it to a minimum](#).

There were, of course, a few exceptions. One, there was only so small that I could get the fusion core. By this point, I knew my way around fusion better than I did fission, but that could only get me so far. Not to mention, I needed space for the shield system, which I was not willing to skimp on. As a result, the suit still had a backpack-looking attachment to house the fusion generator and primary shield systems.

I also wanted whoever was wearing this to have the best maneuverability possible, which meant combining everything I knew about personal jetpacks and boosters together to create the ultimate jump kit. Not only would the armor have its primary booster along the small of the back, but there would also be secondary, smaller thrusters tucked into several other points, allowing the user a much more instinctive level of control over their trajectories.

Previously, the jump kits attached to our armor suits and power armor were restricted to simple leaps and wall jumps, as well as stabilizing and slowing falls. They were basically preprogrammed actions with slight variations, with a computer program adapting to different inputs. But with the new design, a Dumb AI would take in data from the armor's connection point, interpret it, and offer warnings and nudges to correct your posture depending on what you wanted to do. It would essentially train you as you practiced, guiding you until you no longer needed it and had a complete instinctual understanding of the system. Both the user and the system would still need time to learn and adapt, but with the easier-to-control secondary thrusters and the guidance system, it would be much easier to master.

Hopefully.

When I finally completed the design for the armor, I sent it off to the production facility. They would make a few of them and test them out. They wouldn't be able to wear them, of course, but they could do system tests to make sure I didn't screw anything significant up.

According to Samwise, his brigade of MRVNs, the first ones I made who had actually slow-growing AI, were starting to really help with the projects he was working on, keeping things updated and running the production rooms. They were growing faster than I anticipated, though it wasn't overly surprising considering how busy we kept them.

With half of my work done for the day, I headed up to my apartment, stopping to grab a bite to eat from my fridge. It was basic, just a simple sandwich, but it was also nice to have a quiet lunch.

When I was done, I went over to Gloria and David's, where the yet-to-be-named puppy was staying.

As I approached the front door, it opened freely, catching me a bit off guard. Before I could call out, David peeked his head around a corner.

"It's fine, Mom set the door to open so people could visit the puppy," he explained with a shrug. "Not like anyone is going to break in or something."

I chuckled and followed him in, looking around their apartment. This was the first time I had been inside it since I first moved them in, and it was clear that they had taken advantage of my offer to print out anything they might need. An open living room took up the entrance, decorated with hanging picture screens, each playing short clips of various scenes, like Gloria pulling David into a reluctant hug. There was even one of all of us together, enjoying one of Jackie's meals.

I could see a hallway leading to more rooms, probably the bedrooms, along with a small kitchen and dining room behind the living room.

To me, it looked like a decent-sized apartment, but to anyone living in Night City, it was big enough to be something a rich corpo would happily buy. It felt lived in as well, with flowers and plants hanging in several spots.

"You guys really made this place yours," I commented, getting Gloria's attention. She was sitting at the table, where the puppy's pen was, carefully feeding him.

"Thank you," She said, glancing at me before refocusing on her task. "It's easy to decorate when all I have to do is draw out a piece of furniture, and it shows up at my doorstep a few hours later."

"That does tend to speed things up."

I sat down, and we chatted for a bit, during which I helped feed the pup. After a few minutes, Jackie arrived, coming to see the puppy for himself.

"A poco! Look at the little cutie!" Jackie said, bending down. "I can't believe you just took a bone and turned it into a dog, Genio. Lo quiero!"

"Trust me, I know the feeling," I said with a smile. "How did the move go? Your friend find a decent place?"

"Friends, but yeah, they managed to grab a room at H10," Jackie said, rolling his shoulders. "Made moving in a pain, but they didn't have much, so it's fine."

We chatted for a while, mainly talking about the dog and about how quickly he would grow up. After a few minutes, I mentioned we were already making three more to keep the first one company.

"Can... can I have one of them?" Jackie asked, his eyes widening a bit. "I've always wanted one..."

"Why didn't you say something before?" I asked, before quickly adding. "I mean, yes, you can, but we do need to be careful. These dogs represent an *incredible* scientific

achievement. When they get spotted, everyone is going to try and take them...Potentially dead or alive."

"Who's coming for my dog?" David asked, standing up from the couch as his controller clattered to the ground. "I'll kill them!"

"David... I meant *everyone*," I repeated with a wince. "Anyone with any investment in biology, and anyone who would like to make money from selling them. Now obviously we can mitigate some of that simply by being intimidating, but it's a real issue."

"What can we do about it, Genio? I know you got something in that head of yours," Jackie pointed out.

"Well, first off, when they are big enough, we will put an emergency teleport beacon in them," I pointed out. "Keeping them inside secure locations, like the vault, Rocky Ridge, or eventually our towers. I also consider the possibility of... well, having Frank look into converting some implants for them."

"Yuu want to chrome up our dogs?" Jackie asked, a big smirk growing on his face. "Can't say that wouldn't be cool."

"It wouldn't be anything reductive. I'm not hacking their legs off to give them [lynx paws](#)," I said, shaking my head. "But some skin and bone weave, maybe an internal stimpack auto injectors... a monocyte breeder, some skull plates and subdermals to keep them from being one shot... Things to make them durable, not turn them into combat dogs."

"Frank would be all over that," Jackie said, shaking his head a bit. "Would love the challenge. As grim as it is, having them be a bit more durable could only be a good thing."

"Could we maybe not talk about their mortality while he is right here?" Gloria asked, her arms crossed. "You got plenty of other places to talk about it, go there."

After apologizing, Jackie and I left, though not before saying goodbye to the pup. As we made our way across the courtyard, Jackie slapped my shoulder.

"You taking it easy today?"

"I wanted to get some things done early in the week, so the production centers can get to work on them," I explained. "But it's still been a pretty easy day. Besides.... There's a not insignificant chance I will be spending the end of the week getting the first or second levels of enhancement I mentioned."

"Just gonna dive in then?" He asked, eyebrow raised. "Certainly changes since we first met. You used to have a shiver fit any time you even thought about getting chrome back then."

"I designed these things with my own two hands," I pointed out. "I know exactly what goes into them. Not to mention that most of them aren't actually chrome, just serums and injections."

"If you say so."

I waved Jackie off as I headed back to the workshop, ready to get started on the second half of my day's tasks and finally make the shades obsolete.

I started the process by stripping every non-essential component from an ALEO unit. I had decided that, to keep repairs easier, if they were ever necessary, since our usual "repair" process was to toss the damaged bot into a protomatter generator and build a new one, we would be keeping the armor and the internal unit separate.

It would also make upgrades easier in the future, which I was sure both future Samwise and I would appreciate.

Once I had stripped everything down, I started upgrading and layering in components. All computer systems were replaced by crystal computing systems courtesy of the UNSC. Just a chip the size of my palm quintupled the computing power of the original ALEO, and while these would not contain any sentient systems, that amount of computing power would definitely come in handy.

The computer core, which I stored in its torso, was protected by the same hydrostatic gel that was used in MJOLNIR armor to protect Spartans. Considering they could survive a fall from space, I was confident the crystal chip was well protected.

By stripping out the humanoid robot's paneling and other systems, I was able to add more artificial muscles and servos, significantly increasing its strength and speed. Meanwhile, its chest was more or less empty, so I was able to fit a considerably large elerium power core inside. I considered the idea of using a much higher capacity fusion generator, but the elerium core was more than enough, especially with a series of capacitors charged and at the ready.

About halfway through the design, I spotted something and had to back track several parts, cursing all the while. I realized that I had been working with the same-sized frame, but could add several inches in several places. My goal was to keep it under seven feet tall, with their armor, but even with that constraint, I could increase their height marginally.

After I recovered and re-did my work, now with a bit of extra space, I finally placed protective covers on the bot, then sealed that with a thin rubberized polymer "skin."

The skin and plates were supposed to minimize damage spreading from anything that managed to penetrate the armor, through shrapnel or anything else. They barely took up any space and would hopefully help keep the robots functional. It was probably overkill, especially with our aforementioned tendency to throw broken things into the recycler rather than try to repair them.

The final version looked a little rough. It had all the right measurements and was noticeably tougher and stronger than even the reinforced ALEO units, but all of the replacements and removed assets left them without the ability to blend in. The final result was... well, it looked like a skin-tight, armored gimp suit, with two large eyes. They weren't its primary

sensor system, as that would be built into their helmet, but instead a way for the inner robot to move around when it wasn't in its armor.

"That's not going to work, Jackson," A voice said from beside me, catching me off guard. When I recovered, I turned to find Mary projected beside me, a frown on their face. "They need to be able to take their helmets off and not give children nightmares. Plus, you don't actually have much in their head anyway."

I frowned, looking back at my designs. She was right, the head was more or less just a way to fill the helmet and connect it to the processing systems in its torso. It wasn't empty, but what was there could be shifted around slightly.

"I suppose I could give it liquid ski, leave out the rest of the body," I said, looking at the plans. "The internals could shrink a bit..."

I fiddled around with the design, moving some of the connection points around. After about ten minutes, I had managed to create just enough room on the front and sides of the head to include a layer of liquid skin. This would let them present a human face, albeit one with lots of chrome.

"Good call, Mary. You watching over my shoulder?" I asked, giving the design one last look before sending it off to production.

"Just a few minutes, I didn't want to interrupt you," She said, sounding a bit nervous. "Sorry."

"It's fine, Mary, just let me know you're watching next time," I said with a smile. "I'm happy to share your company, especially since you made an excellent point."

"Alright, thank you," She said with a smile. "I did visit for a reason, though. Samwise said he will likely be ready to start launching our stealth satellites sometime tonight. I helped him set up the control network, and Murtaugh has already added the surveillance to the security building."

"That's not too much for him?" I asked.

"He said he was looking forward to it," She responded with a shrug.

"Alright, tell him I'll be there for the first launch."

She nodded and, after a wave, vanished from the projector, leaving me alone again. I was glad we were ready to start pushing into space, as I was dying to see what sort of cluster fuck we were dealing with. I also wanted to get the sensor net up and running so we can start launching probes.

I looked back at my design, which technically wasn't there at all, but rather a projection in my mind via my computer interface implant. With a gesture, I spun the final image around, then

pushed it back and out of the way. I had finished the first part of the combat units design, and now it was time to work on the second part.

Thankfully, part two was significantly easier than the first part. I had already spent a substantial amount of time working on my own version of MJOLNIR, so I had already completed most of this process. I quickly took my design for the inner suit and adjusted its strength to match the newly designed inner frame. I then redesigned the armor plating, coming up with a design that was significantly simpler than ours.

When designing the armor our sentient members would be wearing, myself included, I had gone above and beyond to make it as perfect as I could. They were filled with thousands of moving parts, each designed to work together to move and shift, providing optimal cover and protection, without hampering our range of motion. They were sturdy, but were not designed for long-term deployment. You would go out, fight if you had to, do your business, and come back. Then, while the wearer was chilling out in the vault, bragging about their mission, their armor was scraped and rebuilt from the ground up. They would last long enough, mind you, and could be repaired, but they weren't designed to be simplistic and robust. They were intended to be the very best I could make.

The outer armor for [our new soldiers, on the other hand](#), was built simple and sturdy. It was perfectly functional, I didn't cut any corners, I simply ensured that they would be able to take hits and keep on kicking.

Essentially, our armor could take more damage, but it took considerably more upkeep. The next generation of robo soldiers were designed to deploy and stay deployed, with armor that was sturdy enough to withstand abuse, and that you could fix with a hammer and some pliers. The most complicated part was the helmet, which housed most of the sensors and cameras that fed information into the inner frame.

And finally, with the armor designed, it was time to move on to the last bit, the control systems.

When designing the shades and other robotic fighting assets, one of the most significant issues was how the units controlled themselves. So far, I had done alright, creating a fighter who could, with numerical superiority on their side, come out on top versus Maelstrom. However, I was not nearly satisfied with that. I wanted to deploy my Spartans and have them *clean house*. I wanted *quality* and *quantity*, but I wanted my Spartans to win even if they only had the former, and that meant coming up with a better control system than what the shades had.

Thankfully, I had the perfect solution.

Inside each inner frame would be an entangled photon, which would connect back to the vault. At first, it would link back to my workshop since we were still in the testing phase. Eventually, there would be a massive server room where our teams would be kept.

Each team would consist of Five Dumb AIs, each with an insane amount of available computing power, working together to control twenty-five Spartans at once. Each Dumb AI would have a specialty, and they would work together as a sort of tag team, passing control of their units back and forth to achieve their goals. Stealth, combat, movement, transport, and human interaction. A moving, flowing team of Spartans programmed to move and act like humans, but still have the efficiency of robotically controlled assets.

Once we were done putting the test team through its paces, we would build a few hundred of them, keeping the Dumb AIs here at the vault while they controlled their units in the field. That meant when their units were destroyed, the Dumb AIs, which were capable of learning when it applied specifically to their fields of expertise, would simply take control of another group of units and redeploy, potentially as easy as stepping their group through a teleporter, right into the battle.

The Dumb AI needed to be carefully crafted, as I wanted them to work together seamlessly, without actually being the same unit. It would take some trial and error, but with Mary, Murtaugh, and Samwise help, that process would be pretty straightforward.

I put in an order for fifty complete Spartan units and two control systems, meaning two sets of the five Dumb AI hubs. The hubs would be delivered here, where I could program them, and the Spartan units would be sent to our massive scale assembler, which had become a test arena of sorts after I had my fun in the last MJOLNIR suit I made.

We would test the two groups there, once everything was set.