

Despite wanting to spend more time with Sable and Mary, I knew I needed to focus on my priorities. My time with the Halo tech tree was waning, and I needed to make the most of it. If my experience so far was anything to judge by, full-scale sci-fi future settings rarely came up as an option, which meant I needed to make the most out of every one. Sure, I would probably get something similar or better later, but doing my best *now* would mean having a much easier time scaling to something even more advanced later.

I was still nervous about getting something like Star Trek or Star Wars, and barely getting anything out of it because I was too busy desperately trying to scale my tech up to its level.

As I made my way to my lab, I ended up stopping short and heading to the large-scale assembly room, although it felt a bit off calling it that, given a stadium-sized assembly room was just a teleport away.

Since a good chunk of the day had already passed, and I was honestly still recovering from the starship bender I had gone on for the first half of this cycle, I chose to work on the vehicles of the Halo universe. I desperately needed a better understanding of vehicle design and creation, both land and air. While I happened to like the flexibility that my mechs and robots provided, there was no denying that in a full-scale war, I needed more standard types of combat options. This went beyond the argument of Tank vs Mech, and became simply about things like "How do I get troops around?" "How do I drop this bomb here?" and "How do I patrol this area?"

Mechs and robots were great, but a real army needed an infantry with mechanized assets. Not to mention that I wanted the ability to produce my own cars later, for civilian use and even sale.

Beyond the idea of vehicles, I also needed to update my robot infantry control systems. They would need a crystal core, the tech UNSC used to hold its AI, but creating several dozen different Dumb AI for the robot troops would massively increase their effectiveness. As they were now, they had next to no flexibility or learning capability, which the Dumb AI did, though they still weren't sentient or sapient.

With such a significant upgrade, I could likely get them acting like a real army, with various personality deviations making them more personable to interact with.

Unfortunately, that would either have to wait, or I would pass the idea to Samwise, because now it was time to learn everything I could about vehicle design, starting with the ever-famous [Warthog](#). It was a classic, and I wanted it not just because it would kick-start many of the car branches, both military and civilian, but also because it came with a variety of features I wanted access to, including a hydrogen separator that I was hoping would give me access to more advanced models.

The Warthog designs flowed like water, the relatively small, easily buildable vehicles were absolutely incomparable to the gigantic starships I had been building. Even better, the

Warthog design was pretty standardized, and I was able to clear the majority of the variations by making just two different models.

With an in made on the Warthog, I quickly scanned my tech tree for hydrogen generators, and ended up finding several. Most of them were unsurprisingly uncovered, as I was familiar with most of the technology involved, but they were sufficiently miniaturized to still be worth making. I ended up producing a small, civilian model that could fit in a closet, as well as several larger models that could keep up with the demands of several dozen large vehicles.

Once I was done making hydrogen generators, I called it lunchtime and headed up to Rocky Ridge, specifically the test kitchen. There, Jackie was enjoying some time in the kitchen, working to make lunch for Misty, and happily offered to make me some as well. Misty, who had been spending more and more time at the Ridge, smiled as I sat down at the table across from her, the umbrella above us protecting us from the sun.

"It's good to see you, Misty," I greeted, smiling back at the Polish woman. "It's good to see you coming around more often."

"Oh, I never liked the city," she admitted, idly playing with the picnic tablecloth, idly watching Jackie cook, a big smile on his face. "You can't blame me for getting comfortable around here. Especially since Jackie is spending almost all his time out here now."

"Well, you are always welcome here or any place we build, Misty," I assured her. "In fact, when Vik moves his shop to our new buildings, you're welcome to claim one as well. It should be an entirely different feel, and we will have strict security keeping the place safe."

"Will you all be living there?" She asked, turning to focus on me. "I don't want to live or work too far from Jackie."

"I'm not sure, honestly," I admitted, scratching my cheek. "We are fixing this place up as Tinker Techs headquarters, but our first major achievement in the area will be the two skyscrapers. And of course, the vault is our safest bet. I think we will likely end up faking living in the city, and this place will become our sort of business center and an example of what we have to offer, as well as our 'production' area."

"In that case, I would happily move the shop to a better area," she said with a smile. "A cleaner part of the city and being closer to Jackie would be perfect."

In my head, I questioned why Jackie hadn't asked her to move in completely, but I knew better than to open my mouth. I would see if Jackie was avoiding the question for a reason first.

After lunch, I headed back down to the large assembly room and started working on civilian vehicles. These were even easier than the Warthog, since they were significantly less dense when it came to both features and durability. I managed to make and clear several different branches in just an hour and a half, massively increasing my understanding of ground vehicles.

I was just putting the finishing touches on a rather powerful sports car when I got a message from Mary, asking if she could visit me in my lab. I sent her a mental thumbs up through my connection to the computers, and a moment later, the newly installed holoprojector in the large assembly room lit up, projecting her image on the raised platform that I was sitting in.

"Just a moment, I just need to..." I said, before fastening the hood of the vehicle with its bolts, before pulling out from my connection to the room and coming back to my own senses. "Good, done for now."

"Why are you working on civilian vehicles?" the newly created AI asked, looking out into the room, likely accessing several cameras to study the sports car more closely. "That seems rather... pointless."

"Every new thing I add to my repertoire is useful," I refuted, shaking my head. "Especially since I'll likely be selling some version of these soon. Additionally, I had virtually no knowledge of building or designing vehicles. Now, by the time I go to bed tonight, I will be an expert three or four hundred years more advanced than the experts here. Disregarding unique tech and knowledge spikes."

"Knowledge spikes?" She asked, turning to look at me. "What's that?"

"Well, some realities have certain bits of tech that are oddly advanced," I explained, leaning back in my chair. "This world's cyberware is significantly more advanced than it should be, especially considering how long this world spent blowing itself to pieces. The Jurassic Park tech tree had a way with genetics that is beyond even the UNSC, though that might be more due to the fact that no one *wanted* to delve that deep. Even the liquid skin from Become Human is *bafflingly* elegant compared to the time period it's from."

"Wouldn't it be better to wait for someplace with a unique knowledge spike in vehicles to spend time on it, then?" she countered, her voice genuinely curious. "To get more out of it."

"You would think, but in order to achieve those higher levels, I need to work up to it. If I rolled some sort of crazy racing world, or god forbid, something like Zoids, without having some sort of underlying understanding, I would miss out on the good stuff, trying to work up to it. For example, creating a UNSC Smart AI would have likely taken me days if I hadn't already had such a solid programming foundation from Titanfall. Creating you, a being that I would say is even one step beyond that technology, would have likely taken me even longer, if I figured it out at all."

"I see..." she said, nodding along. "Each tree is a chance to expand. Not expanding when you can may make reaching other expansions more difficult."

"Absolutely. Eventually, I will hopefully reach a point where even an advanced tech tree would only consist of me quickly making a few interesting things," I responded with a shrug. "Granted, now that I have such a broad understanding and such a solid production capacity, the

chances of me being screwed or overwhelmed are becoming more and more slim, but the idea still stands."

She nodded along, her projected form flickering for a moment as she considered my words. After a few seconds, she refocused on me, the color of her projection shifting through a few colors before settling back to her standard blue.

"Apologies, I did not mean to distract you for so long," She admitted, her projection scratching her cheek. "I wanted to ask your permission for something."

"Sure, what is it?"

"I would like one or more physical forms to control," She explained. "I don't know how often I will use it, controlling a full body might be distracting, but... I would still like one."

"That's absolutely fine, Mary. Do you want something special, or will a female-styled Aleo unit be okay?" I asked with a smile. "We can put liquid skin on it as well. Does that work?"

"Absolutely, would I be able to upgrade it?"

"Sure, just don't forget we are still keeping a lot of our tech secret," I pointed out. "Tell Samwise what you want, or ask him to show you how to submit a work order yourself."

The two of us chatted for a few more minutes, discussing upgrades and possible customization she could make, before she left to focus on checking our security. I had no doubt that she had been multitasking during our conversation, but I was glad to see she was comfortable talking to people enough to seek me out. Just like I had for the other AI, I would have to keep an eye on her to make sure she was doing alright and developing properly, though her development was considerably different from, say, Samwise or Riggs.

Once Mary headed out to keep working on our security, I buckled down. I had about ten hours before I needed to sleep, which meant I had a good opportunity to get this vehicle's stuff done and dusted. I would be tempted to call it done even if I didn't get to what I wanted, as long as I got my hands on some of the UNCS starfighter designs, specifically the [Sabre](#) and [Longsword](#). The Sabre was an interceptor with some serious potential, at least at the scale I was working with, and the Longsword was a multipurpose starfighter that could fit a variety of roles.

I would dedicate three hours to completing some heavy ground vehicles before moving on to the aerial vehicles, including those meant for space.

Rather than leaving it to the last second, I decided to work on the aerial vehicles first, starting small with a Hornet and a Sparrowhawk, before moving on to larger models like a Pelican and a Falcon. Luckily, just like the light vehicles, and hopefully like the heavier vehicles, almost all of the vehicles I was making had updated versions that I could start off with, since I was already so deep in the general construction of UNSC equipment through ship building. That meant by making one of each, I was unlocking a long line of versions and upgrades.

When I was done with the simple atmospheric ships, I quickly put together a Sabre and Longsword, both of them taking a bit longer than I was hoping. It cut into my ground vehicles time, but in truth, that was okay, since the list of medium and heavy ground vehicles that I wanted was pretty simple, and I was happy to cut their supermassive vehicles completely, considering I didn't have much use for them, and if that changed I could make due with what I had and make my own versions.

Among the list of things I built were three different tanks, a [Scorpion](#), a [Grizzly](#), and a [Rhino](#), as well as two medium vehicles, [a Cobra](#) and a [Wolverine](#). I finished off the day with a [Mantis](#) and a [Colossus](#), just to round everything out. The knowledge I got from the two mechs would go a long way to helping me design a better control interface for my own mechs

I ended up staying awake a bit later than I had wanted, but in the end, I managed to complete most of what was on my list. Anything else would get added to the lists of "wanted but not needed" to get tackled if I had any free time by the end of the cycle. I wasn't anticipating much, unfortunately, but the list was there if I did.

The following morning, I woke up to a message from Noah, containing plans for the large warehouse intended for our production facilities, including both the medical technology we planned to sell and the sandwiches from our food division. The plan was to "ship" parts and ingredients to these local facilities, where they would be assembled by local workers. This would almost certainly end up being expanded, as the demand and spread of our products grew, but for now, we settled on five large buildings, built outside of Rocky Ridge to the North. Noah was basically having a field day planning things out, and I warned him to keep things scaled to our development, not to our resources, since those were basically infinite.

I approved the plans he sent me, as they matched the aesthetics of the Ridge we had been working with so far, and met all the other requirements we needed.

When I was ready to tackle the day, I grabbed some food from my kitchen before heading down to the labs, skipping lunch with the group. I planned on clearing as much of the medical field as I could today, as well as the Spartan super soldier program. Such a double header meant I needed as much time as possible.

Thankfully, I did have a slight advantage in that a good chunk of the medical field was already cleared and unlocked. I had put together three medbays inside starships at this point, ranging from glorified closets to a fully equipped hospital room on one of the corvettes I made. I had already completed most of their large-scale machines, which in turn had cleared out other smaller bits of equipment. All that was left at this point were a dozen smaller bits of tech, the chemical formula for a few dozen different medicines, and a few other interesting developments. I specifically wanted items like the self-sterilizing bandages and Medigel, which was a topical healing aid touted as a miracle healing substance in the games, but is actually just a relatively safe cocktail of drugs meant to aid in healing and recovery.

I worked on medicine and medical equipment until two in the afternoon, collaborating with Frank in the Bio lab to create various products. Before finishing the general medical portion

of my day, I developed [Biofoam](#), a rather ingenious creation that I had been looking forward to for a while now.

Biofoam was essentially a canister of pressurized ingredients that, when injected into a wound, would fill up and seal it closed, disinfect the area, keep it clean, and numb the pain. It could even help accelerate the healing of an area and, in a pinch, can be used to stabilize broken bones or at-risk neck injuries by being sprayed around the neck and shoulders of the patient.

Essentially, the injector is jabbed into or sprayed over a wounded area, such as a broken bone, bullet wound, plasma burn, or decapitated limb. The foam expands, sealing off any bleeding, before the numbing component soothes the pain of the wound. As you can imagine, that order of operations can make the initial application quite painful. Any material exposed to air turned into a hardened skin, while the other side conforms and binds to the wounded area. After a few hours, the foam disintegrates, but it can also be sprayed away with a solvent.

While biofoam was not nearly as impressive as stimpaks, it did have its uses, specifically in bridging gaps where stimpaks, even multiple of them, were ineffective. Large gaping wounds, lost limbs or digits, deep tissue destruction, arterial injuries, and any injuries involving deep tissue cauterization were known to cause issues with stimpaks. Surprisingly, it just so happened that many of those gaps were where biofoam performed its best work, especially some of the more advanced versions presented later, after the Human-Covenant war.

In all honesty, I would consider a couple of stimpaks and a few injectors of biofoam to be a first aid kit that could service *most* scenarios. Hell, throw in something to fix anaphylactic shock, of which I now had several options, including the classic EpiPen, and a civilian defibrillator, and you basically have everything you could need for ninety-nine percent of issues.

Thankfully, creating the biofoam, even the more advanced versions developed later, was a simple project, even with the injector system. Once it was done, I sat back with Frank to discuss the Spartan upgrades while I had a quick lunch.

"We are going to have to start with the lower programs, but there's no way we will ever use the information," I explained. "[Project Orion](#) saw minimal results, and I'm pretty sure it messed a whole lot of people up, and the second program requires child subjects."

"Are you looking for the third then?" Frank asked, standing by the growing tanks, taking notes on their only occupant, the unborn golden retriever.

"No, the third was somehow even more fucked up than just kidnapping kids and turning them into supersoldiers with a survival rate about as good as jumping from an airplane without a parachute," I said, shaking my head. "In fact... I think the third program required children as well."

"Than the fourth?"

"Yeah, it wasn't until then that the procedures were actually safe, and could be done on adults capable of consenting," I responded with a wince. "Even worse, when the program started, meaning the first two attempts, the extinction-level war with the Covenant hadn't even started yet, so they can't even use it as an excuse."

"...and you said this is one of your favorite franchises?"

"Yeah... I was a kid, and most of this info comes from the books anyway, which I only read a few of," I explained with a wince, before focusing on what Frank was doing. "How's the pup doing?"

"He is growing at an acceptable rate," The AI doctor and biological researcher responded, leaning in to examine the fetus. "No concerning deviations. He appears to be a healthy, growing male canine."

"That's good," I said, standing from my chair and brushing off my lap, moving to stand beside the AI robot. "With the extra knowledge from UNSC, we could likely improve this process, but it would likely introduce some instabilities. Better to keep it slow and steady for now, and we can collate the data later."

Frank nodded in agreement, and after watching the gently floating canine fetus for another minute, I returned to the task at hand, finishing lunch so I could get back to work. Once I did, and Frank was finished with his check-up, I began working on recreating the first supersoldier program, Project Orion.

Before this project, soldier enhancement and bolstering projects were not exactly new fare, and the first attempt at the project was, in many ways, just an extension of that. It was an attempt to gather together and improve and combine existing stimulants, steroids, and other possibilities into a regimen that could take elite soldiers to the next level. The efforts were so basic that I could already see and understand all of the "enhancements" from the first attempt.

The second attempt was when things started to get interesting, in a train wreck, horrifying way. It was hard to tell, as I was working with the absolute bare minimum of information, but in the second attempt, Orion wasn't just a project, it was a program with actual combat-ready soldiers. I could see this from the existence of several long-term treatments, some even developed to stabilize the *children* of those in the program.

Frank and I quickly blueprinted and created dozens of injections, treatments, implant materials, and more, coming to the end of the program's development pretty quickly. With each creation, it was clear that a great many of the members of the project would have begun suffering horribly as they got older. Once I finished with Project Orion, which would later be renamed the Spartan I program, I began working on the Spartan II enhancement project, which, according to the tech tree, was referred to as [Project: Aster](#).

The project boiled down to five enhancements, involving five radical surgeries. There was a treatment to increase the sensitivity of your eyes, a mass injection that increased the density of your muscles, a thyroid implant that increases that further, as well as guaranteeing

the quality of that muscle, the fusing of a ceramic carbide to the bones to make them nearly indestructible, and the injection of a frankly incredible material that latches on to neuron dendrites and increases their sensitivity and activation speed, resulting in a three hundred percent increase in reflex and a notable increase in brain power.

Of course, each of those enhancements included a marked danger of backfiring. Completing all five meant that any one *child* undergoing enhancement had about a fifty percent chance of surviving unscathed.

Not to mention that it would all be incredibly painful, especially since the participant would need to be awake and engage their muscles and body to prevent things from settling poorly.

Continuing the war crime Olympics was [Project: Chrysanthemum](#), the Spartan III augmentation process. This project was clearly designed to be a cheaper version of the first program, and as a result, most of the enhancements were shifted to a drug regimen. There were some physical augmentations, but they were on a much smaller scale and with a higher survivability.

Of course, the increase in survivability was offset by the fact that these intentionally cheap augmentations were being done to twelve-year-olds.

At some point, the war crime roulette seemed to blend together, only stopping when we finally started working on the treatment for the Spartan IVs, also known as [Project: Orchid](#).

There was a critical difference between Orchid and the other projects. This one wasn't actually a horrifying affront to morality. The treatment and augmentations were stable enough that they could be safely performed on adults, meaning that soldiers were asked to volunteer, no raiding of orphanages or homes required.

As a result, the program was perceived as a more acceptable and open option, with long-term potential. And like most long-term projects, there were several iterations, meaning that improvements were being made rather consistently across the board during the lifespan of the project. As I worked my way through it, I could see three different versions of their lung augmentations, starting with complete replacement, before shifting to a mesh insert, and finally settling on a combination of the mesh and several small implants along the superior and inferior lobes.

Not only was this useful because I knew that I would have access to the absolute best versions of the Orchid project the UNSC had access to, but it also meant I had a variety of options to choose from. For example, during the first Spartan IV batch, they used fullerene lattices to reinforce the soldiers' bones because the application method was simple and less destructive. Unfortunately, it was also inferior to the carbide ceramic used in Spartan IIs. By the end of the program, at least what I had access to, they had developed a more stable and humane method of applying carbide ceramic to around eighty percent of a soldier's skeleton, while utilizing [fullerene lattices](#) for the remaining twenty percent.

That meant if I wanted a simple and easy bone reinforcement method, I could use fullerene, which by itself was a not insignificant improvement to the current cyberpunk [bone lace](#). However, if I wanted a compromise and was willing to go the extra mile, I could use the eighty-twenty mix, or any ratio I wanted. I had options, and that was always good.

When Frank and I finished cutting a swath through some of the UNSC's most advanced military medical projects, it was around midnight, and I was a bit surprised that we had managed to finish it all so quickly, even if it had been an entire day of designing, assembling, mixing, and synthesizing. The bio lab was a mess of apparatus and vials, ranging from application tools to injections of space-aged materials. Some of it would be scrapped immediately after Frank cleared them, but some would get slotted into space around the lab for future use.

Before calling it a night, I spent some time considering what I unlocked, comparing my previously unlocked tech, the Cyberpunk world's chrome, and what I had just worked my way through. In all honesty, I was thoroughly impressed by the UNSC. There was no doubt that Fallout and Cyberpunk beat the hell out of Halo in terms of flexibility and unique ways that you could turn a person into a one-man army.

However, in the areas where the various Spartan enhancement projects focused, they undoubtedly pushed *past* what my other tech trees had in common. In pure strength, speed, and durability, an unarmored Spartan IV would beat the pants off of a top-tier courser, and they would certainly crush most chromed-out gonks. Only a full-blown, combat-oriented borg would stand a chance, and even then, they would have to know how to use it.

An armored Spartan, with shields? That was something else entirely.

Of course, there was no reason for us to limit ourselves to any one tech tree. We had access to all of them, so why not mix and match the best? Frank would be spearheading the process of integrating the UNSC enhancements with Fallout bioware and synth tech, as well as tech from this world into a complete super soldier package.

I would likely indulge in some level of that package once it was done, at least enough of it to be able to wear full Spartan armor.