Chapter 21 - Eureka

The metal woman sat on the floor among the broken pieces of my coffee table, looking around as if wondering how she got here. Neither of us made any more sounds until she looked back up at me. Her hair was pulled back, though it lacked individual strands of hair.

"Ema?" I asked after a moment. "That you?"

"Who else would it be?" She asked, still no expression on her face. "You saw me connect to this, and then saw me changing its default setting."

"I... I don't know." I admitted, rubbing the back of my head. "I guess I wasn't quite ready for... this."

Ema looked down at her body before struggling, trying to stand. She clearly wasn't sure what she was doing, so I walked to her and helped her up to her feet. Her body was solid with absolutely no give, and heavy as well, though not ridiculously so.

"What's going on?" I asked. "Everything alright?"

"Everything is fine. I'm just having to... well program isn't the right word, teach it maybe? A little bit of both. The creation-"

"Nope, not calling it that, makes me sound like either a mad scientist or someone with a god complex." I said. "How about calling it your exosuit?"

"I suppose... that works." She answered as I helped her sit on the couch. "My exosuit needs to learn. I can control it pretty well..."

She said, raising her hand and transforming it into a variety of things, from a cube, to a pyramid to a cylinder, a second head then finally a pretty decent replica of Lady Liberty's torch.

"But the second I stop controlling it...." She continues, the torch losing its definition and shrinking back to a hand. "It goes back to its default. The default was originally the cube that came out when you first made it, but now it's this."

She gestures to herself, her face still completely expressionless. She looked down at the broken mess of a table and stared at it for a moment before her legs liquified and spread out, engulfing all of the smaller shards. She worked for a moment before her legs returned to their now default shape, all of the pieces she gathered stacked together in a pile before continuing.

"Though it still returns to a cube when I'm not inside it. But I'm going to have to teach it how to move, how to stand, and how to emote." She explained, looking up at me and slowly smiling before letting her face settle back to expressionless. "It's going to be an interesting process."

"I know you can handle it." I said encouragingly, kneeling next to the couch, carding pieces of the coffee table and tearing it away. "I mean would you rather it somehow come pre programmed with all that stuff?"

"I... I suppose that's a fair point." She admitted.

"Where is your real body?" I asked.

Her body rippled, her chest flowing and shifting to either side to reveal her small drone frame, still connected to the rest of the metal. After a moment her body reformed and smoothed out.

"Can you shift it around?"

"Yes, it can be moved around."

"This... this worked out a lot better than I expected." I admitted, shrugging when Ema turned to me. "I assumed it was going to be basic forms, something that would protect you, allow you to move and maybe even fight if need be. I did not expect this fine of control."

"Well... I am a named card." She pointed out. "And this is an A ranked card."

"Well yeah but I didn't know I was making an A ranked card yet." I responded, pausing for a moment before hesitantly asking my next question. "Uh soo.... Should I get you some clothes or something?"

"Clothes? It's a bunch of metal and goop you turned into pseudo programmable smart metal." Ema pointed out. "And I'm still just a drone inside it. Why would I need clothes?"

"Okay, well first you're not 'Just' a drone, I want that to be very clear. " I said, not willing to hear her belittle herself. "I will give you the same respect and rights that true artificial life deserves, which is the same that any natural born life does. If you don't think clothing is important that's fine, but it's not because you 'just' anything."

"I... Thank you Carson." She said after a minute. "For now I don't believe I need clothes. That might change at some point."

"In that case when you eventually go out into the world you might want to change up your look." I said, standing from the now cleared floor and sitting at the couch. "Reasonable people probably wouldn't care after you explain it but if the average person is perfectly reasonable..." "Than fifty percent of the world is less than reasonable. Alright, I'll come up with an armored or less detailed version."

"It's lower on the list, your ability to move and emote are more important I'd think." I said before adding. "But ultimately it's your choice. It's your exosuit, your form."

"I appreciate that Carson and ... sorry about the coffee table."

"Eh, it's fine. It was a piece of crap from Ikea."

We both chuckled for a moment before I focused on my notepad, brainstorming ideas for how to crack expanded storage. It was hard to focus on it after what I had just made. After a moment Ema spoke again.

"Oh, right! I had a thought when you were gone." Ema said, as I looked up from my notepad. "Haven't you already kind of done a type of expanded storage? Your gloves and your lighter, both of them hold a lot more than they should, and the gloves even recharge over time."

"I... hadn't looked about it like that, but I guess?" I admitted, frowning as I thought about it.

I summoned the carded gloves from the Deck, studying its concepts. It didn't have any concepts related to expanded storage, or being bottomless. It had a slow regeneration concept, from the smoke I assumed, as well as a feeling of having more smoke powder stored in the small red tanks on the back of the hand than should be possible.

"There's no sign of expanded space... but there is a lot of material? Could that be the key?" I mumbled, mostly to myself. "I need to test this."

I stood up from the couch and made my way to the kitchen, absently carding all of the remaining metal stock. I had a few sheets of titanium, aluminum and most of my copper left over, but everything else had been used. After I was done I went through my recycling bin, grabbing a bunch of beer bottles and putting them in the sink, finding seven in total. I quickly rinsed them out before combining two and filling it with water, then filling two with water then combining them together. I held the modified bottles, one in each hand, tipping them over into the sink. The water poured out into the sink, but the bottle that was made from two filled bottles drained slower, the water line inside lowering much slower than it should be despite water freely flowing from it.

I put the normal pouring bottle aside, carding the now empty abnormal bottle. It did not have any concepts related to expanded storage, and was still empty. It did have a concept for holding liquid though. It was stronger than the other bottle's as well. I pushed it from its card and held it in the sink, slowly filling it with water. Again the water line was moving slower than it should be, this time slowly rising as it filled with water.

"That was it Ema!" I said happily, putting the remaining normal beer bottle back in the recyclables and destroying the other two.

"What was it?" She asked.

When I walked back into the living room Ema had turned her head to look at me, but her face was locked to an expression of absolute horror. I stopped in the entrance way before realizing she was practicing or something when the expression morphed into a surprised face.

"Your Uh... Your hunch about the gloves." I explained, doing my best to ignore her changing expression. "I explained earlier that storage as a concept doesn't scale? I was only half right. Storage at a base concept doesn't scale. But the concept of storing something particular does, but only if it's currently holding that particular thing."

"So you have to combine it with things inside?"

"Yeah, but I think it has to be a specific thing, otherwise everything would be air storage and this wouldn't be a problem." I explained, starting to pace as I talked. "In the same vein, I might be able to add some flexibility but too much and it must snap from being one specific type of storage to just being general storage."

I kept pacing, wondering how I would work this new discovery into my arsenal of tricks. I wanted to test this out practically first and Clint's quiver would be as good a place as any. Eventually I turned to look at Ema.

"Okay, I want to see if this works. I'm going to go to a bunch of sports stores and see what I can find. I should have enough time before things start closing." I said, already getting ready to leave. "Are you okay to hang out and work on that?"

"Yeah, I am fine." She answered, extending an arm an extra few feet out to grab the laptop. "Get enough to make two, adding extra space in your quiver would help a lot."

I nodded, pausing to push my cash onto the table, grabbing ten grand and putting it into my modified card, recarding the rest. I rushed out the door, locking it up and headed out to my truck. Thirty minutes later I was at my first store. Armed with my modified card and a lie about replacing the archery team's equipment I bought sixteen small quivers and eight large quivers, as well as a hundred and twenty five arrows, all that the sports shop had. At the next stop I bought eight more smaller quivers and eight larger ones, making sure to get different styles and capacities and again buying as many arrows as I could. At the final shop, which I just managed to get to before it closed, I bought the same amount of quivers but managed to buy two hundred and fifty arrows of various types.

The drive home was slow as traffic clogged the roads. Eventually I got so fed up that I pulled into an alleyway and carded my truck, pushed out my bike and rode the rest of the way home.

When I finally got back I was surprised to see Ema walking around the apartment, albeit unsteadily.

"Welcome back Carson." She said, not stopping as she walked around. "Did you make it to the shops?"

"I did, got everything I need... I think." I replied. "How's the learning/teaching going?"

"It is progressing, though not as well as it seems. I gave up on facial expressions for the moment, I got bored of watching people on youtube emote."

"That's a thing?" I asked with a raised eyebrow, making my way to the living room, unloading all of my purchases onto the couch and floor.

"It's mostly acting tutorials and demo reels." She explained, making her way to the living room, stumbling slightly. "I miss flying."

"I'm sure I'll crack that eventually." I said with a chuckle, going through my purchases, grouping the different types of quivers together. "Until then you could always leave the exosuit."

I started opening up arrow packages and feeding them into the quivers. It was a slow process but my modified knife made it a bit easier as it sliced through every packaging strap, wire and zip tie. When I was eventually done I had two big piles of quivers and a few dozen arrows left over.

"Okay, all set, now I just need to figure out how to do this."

I picked up two smaller quivers, carded them, and combined them together. The result was a quiver that still looked small but could carry almost as many arrows as one of the larger quivers could. I pushed it out into my hand and inspected it. The quiver looked completely normal. Five fletchings poked out the top, with no hint of any weirdness. I slowly pulled an arrow out and a new one replaced it, seeming to come from deeper in the quiver. I put the arrow back and it seemed to slide deeper than the size of the quiver would allow, seemingly disappearing into its expanded storage.

"That is bizarre." Ema said, floating above my shoulder.

I jumped, my extra strength causing me to bounce off the couch by a foot before coming back down with a thump.

"Holy fucking shit Ema, you scare the hell out of me! When did you get out of the exosuit?"

"A minute or so ago." She answered simply. "I couldn't watch you work in it."

"It's harder to watch me work if I die of a heart attack too." I said before taking a deep breath, noticing the cube of her exosuit in the corner. "And yes, it is bizarre. But it works."

"How far can you push it before you hit diminishing returns?"

"I don't know, but now that I have money to spend I'm much more tempted to not care about diminishing returns until it turns into no returns."

I picked up two of the larger quivers and combined them together, before repeating the process a few times. After four more combinations I studied the card.

"It's still growing strong." I said. "I think the variety of the quivers is helping."

I kept combining, this time starting a new large quiver, again combining it five times in total and then combining those together. Encouraged by the result I kept combining, even when diminishing returns started to show up. When I was done I pushed the quiver out into my hands and began the process of pulling out all the arrows so I could count them.

"Two hundred and four arrows." I finally said. "That's pretty damn good, even for a B ranked card."

"It's certainly an upgrade to your current quiver." Ema responded. "Assuming that's what this one is for?"

"Yeah, Clint gets the small one so they can fit it on his back with his current one." I explained while feeding the arrows back into the bag before carding it again. "I'm not making his auto organizing like mine so he will need to keep his current kit."

I pushed out my old modified quiver and made sure it was full before carding it and combining it with my new expanded quiver. The result was still B ranked but could store two hundred and eleven arrows. I once again emptied the quiver, immediately putting my special arrows back before adding all of the arrows I had made so far. Noticing that it had plenty more room, I combined nails and screws with the blunted tipped arrows I had just bought to make thirty extra arrows that were potentially lethal but wouldn't do anything massively dangerous, like explode or pierce several inches of steel.

After I was done admiring my new piece of equipment I quickly worked my way through the other quivers. I bought thirty six of the smaller tube style quivers between the three stores and when they were all combined down I had a single one that held a hundred and fifty arrows. I emptied the quiver, gathered and carded all of the normal arrows and carded Clint's quiver as well.

I spent a few minutes binding the new quiver to Clint, using half of the supplies they gave me to do so. The quiver went from a simple black leather and plastic tube to one accented with a deep purple.

"Okay, that's one thing down, tomorrow I'll go out and buy everything I need to make Clint's glasses."

"I'm sure Shield would appreciate the quick turnaround."

"... Maybe I should let them know for a few days then?" I said after a moment

"Why?"

"Because, I told Clint that I would have to figure out both of his commissions." I explained. "This could be an opportunity to understate my power."

"Except you already showed them you could make things quickly when you arrived at the second meeting, less than twenty four hours later, with an entirely different costume and abilities." Ema pointed out from the kitchen. "I suppose you could try and convince them that you had been working on it before but would they really believe you?"

"No... Probably not." I admitted, not pouting at all. "Alright. I'll make his glasses tomorrow and call him when they are done. Before that though, we need to get you some practice running, jumping and moving around more. Having you as back up would make me infinitely less paranoid when I go out."

"And keep me from wondering if you've been caught when you get stuck in traffic." She shot back before continuing. "Do you have a specific place in mind?"

"Well unless you need something specific I was planning on switching to the super truck and driving to an abandoned warehouse somewhere. I know there are a bunch around the city. They should probably have enough space for you. We can head there super early in the morning and use the sunrise for light. You can practice your movement and I can see about getting familiar with my new deployable armor."

"You don't mind getting up that early?"

"Please, my sleep schedule was doomed the moment I realized I was going to attempt to be a good guy in a marvel universe." I assured her. "Besides, I'll get some sleep now and head out just before sunrise."

"Well thank you." She said...

"You don't have to thank me." I said, waving off her thanks. "Even if getting better and more effective with your exosuit didn't directly benefit me, this would be nothing compared to how you've helped me. Don't worry about it."

I stood and stretched, yawning as I felt my back crack, showing off my improved flexibility to stretch every muscle and joint. I turned, nodding to Ema as I walked to my bedroom.

"I'm going to turn in now. Wake me up an hour or so before sunrise."