

## CHAPTER 13: MOVING DAY

**Log date:** January 23, 2422

**Location:** Xanthe

**Log note:** The more things change, the more they stay the same

WORK ON THE *VANGUARD* went very well – in fact, the ship was completed ahead of schedule. In January 2422 Dr. Mazatl held a quick meeting with the Board of Directors to get a status update on the company's two critical projects.

“The *Vanguard* is ready to launch,” Martin Yates said. “The ship has been stocked and is ready to go. We can leave at any time.”

“Excellent!” Dr. Mazatl replied. “That means that we can leave Xanthe as soon as we have finished automating the planet's maintenance processes. How close are we to achieving that goal?”

Bernard spoke up. “We've actually been going live in stages for months. Every week we've rolled out a new automated system across all the Ranger colonies. So far we haven't seen any problems. Well, there have been some issues, but they've all been minor and were easily corrected. The last system that we're going to convert was put in place two days ago and so far it's working as expected. Aside from continued support to make sure that everything doesn't catch fire, I think that project is complete.”

“How long do you need to remain here to monitor the systems? When will you feel comfortable about leaving the planet?”

“That's hard to say. In theory we can fix the system after we leave if something goes wrong, but we've never had to do that before. If we weren't under any time pressure I would like to wait a couple years to see how things work and let the system settle in, but I realize we can't afford to wait that long. Technically we can leave any time, but I'd like to stay here at least another month at a bare minimum.”

“All right. That sounds reasonable. What would you think about leaving on March 1? Would that be acceptable?”

Bernard frowned. “It's sooner than I would prefer, but we can make it work. I'll get in touch with the other worlds and will discuss the matter with them.”

“The *Vanguard* will be ready and waiting,” Martin commented. “We have it hidden in space far away from the planet, behind an asteroid. The ship is impossible to see from Xanthe – not that anyone is looking for it, but it's best to be safe. Given that everyone is spending all their time in Vaults these days, I highly doubt anyone will find it, but the longer we wait the greater chance we have that it will be detected.”

“Very well – then we will plan on leaving March 1. On that day we will hold a mandatory company meeting.”

“When should we announce it?” Bernard asked.

“The day before. I don't want there to be time for word of the meeting to leak out. I'd rather the meeting happened without interference from any of the Ranger governments. We'll tell our employees that this is a project meeting to announce our next big initiative – which will be the truth, after all. Just not in the way they expect.”

"Then March 1<sup>st</sup> it is," Bernard said. "When should we give the order to evacuate our employees from the other worlds?"

"I think it should all occur simultaneously," Dr. Mazatl said. "If they evacuate in stages then the Rangers might hear about it and try to stop it. I don't want anyone to get left behind or attacked – there's been too much of that lately as it is. Since our transporter doesn't have enough range to cross the stars, we'll need to meet with them in space at a predetermined rendezvous point and bring them on board the *Vanguard*."

"I'll take care of the details," Bernard promised.

\* \* \* \* \*

On March 1, 2422, all of the employees of the Diano Corporation on Xanthe met in a newly constructed auditorium. Despite the fact that the company employed 12,000 people, everyone was able to fit comfortably into the room. People even brought their wives and children, which was highly unusual. No one understood why absolutely *everyone* had to attend this meeting, but the Board insisted upon it. They had even taken the unusual step of sending teams of bots to search the building to make sure that every last person was inside that room.

Over the past year the company had seen some attrition. Several hundred employees had left the corporation in order to take up residence in the Vaults. None of those people were here – which was not surprising. They had already made their choice.

Victor noticed that Lane and his entire team was not present. This did not surprise him. Technically they were still employees, but they had left the Building long ago and were heavily involved in the Vaults. Victor knew what this meeting was actually about and he was not surprised that Lane was being left behind.

*I wonder how many people in this room know why we are really here. The Board obviously knows, and I know. We're about to leave this planet forever – and oddly enough, I'm really not that sad about it. Xanthe has always been a hostile place. I hope the next world will be an improvement.*

Victor sat at the back of the auditorium and watched the crowd. At precisely 10am Dr. Mazatl walked up to the stage and stood in front of the podium. "Good morning, everyone! Today I am here to announce an exciting new initiative – something that will change the course of the future. This is quite possibly the biggest task we have ever attempted. But before I unveil our new project, there is one last thing to do."

Dr. Mazatl pulled a small electronic device out of his pocket and pressed a button on it. Victor felt a strange sensation of vertigo – as if he had suddenly fallen from a great height. The sensation passed as quickly as it had come.

He glanced around the room. The crowd murmured; they had felt it too. But Victor couldn't see anything wrong. The conference room looked exactly the same. What had just happened?

Dr. Mazatl resumed speaking. "I apologize for any discomfort you may have just felt. What I am about to tell you requires the strictest of secrecy. In order to make sure that no one overhears this conversation, I have taken the liberty of transporting all of you onto the *Vanguard*, a starship that is in orbit around Xanthe."

*That* provoked a reaction from the crowd. People immediately began to talk excitedly and ask questions. Dr. Mazatl quickly quieted them. "Yes, it's quite true – you are not on the planet anymore. The Diano Corporation has had a short-range transporter for years. We kept it a secret because,

frankly, we were convinced that if President Rios ever got control of it he would use it in all sorts of terrible ways. The technology was simply too dangerous to release – but it's exactly the sort of thing that comes in handy when you want to transport thousands of people from a planet to a starship without being seen.

“Which brings me to my announcement. As you no doubt have noticed, the Nehemiah IV probes have been a great success – but SOLOMON has not. Our data warehouse is simply incapable of keeping up with the influx of data from the probes. Since we can't manage our expanding network of probes, we can't allow them to multiply and colonize the entire galaxy. That presents a rather serious problem.

“You see, our lives in this world are rather short. We aren't going to be around forever to manually manage the network of new worlds that we are creating. In order for the Nehemiah IV probes to reach their full potential, *someone* has to be around to manage them and the colonies they will create in the years to come. The only reasonable solution is to build an artificial intellect to manage them for us.

“Just as many of you have spent the past year automating the maintenance and repair of our systems across all the Ranger worlds, I proposed to the board last year that we should automate the maintenance and repair of the Nehemiah IV project. I believe the company should replace SOLOMON with a machine that can take care of the newly-created colonies during the millennia to come.

“This system has many advanced requirements. It will need the ability to grow over time. It will need to be able to understand and learn – two features that we've never really been able to achieve in the field of artificial intelligence. It will also need to be located far from civilization, to protect it from any disasters that might befall our civilization.

“This replacement to SOLOMON – which I have named the Artilect – will be built in a star system that is 1,200 light-years away from the nearest Ranger colony. The ship that you are now in can reach that location in six months. The *Vanguard* is large enough to take the entire company along for the ride, if you are willing to come.

“As you all know, life in the Ranger worlds has been intolerable for decades. We've maintained their worlds and kept them running, but we've been forced to live as prisoners. Building the Artilect will take a large team – in fact, it will take all of us. What I want to do is establish a permanent new colony on this distant world. It will be a new home for us; a place where we can all finally be free. It will be a world of our own.

“Now, you don't need to worry about the inhabitants of Xanthe. They're quite happy in their Vaults, and the automated systems you've built will continue to keep the ZPEs running in our absence. They should be fine.

“As I said, this ship is large enough to take everyone along. However, once we leave we're not going to be coming back. This move is permanent. If you don't want to join us that is fine; you can remain behind. No one is being forced to accompany us. It is your decision. You can come with us or you can remain here. The choice is up to you.

“But I'm afraid you don't have much time to think about it. Now that all of the Corporation's employees have been evacuated from all the Ranger worlds, we are in grave risk of being detected. In order to ensure the safety of this vessel and its passengers we are going to leave in one hour. Once we leave we are going to lock the Diano Building down and secure it. No one will be allowed in or out. We have prepared quarters throughout the city, outside of the Building, for all those who might not wish to join us. If you decide to stay behind then you will continue to receive your regular plasma

allowance, and you can spend the rest of your life doing whatever you want to do. The only thing you *can't* do is go back to work, because there won't be any work to go back to. We will all be gone.

“If you want to join us on the voyage then just stay here. If you want to remain behind then let me know. An hour from now we will beam those who wish to remain back to the surface in one group, and then depart on our voyage.

“Are there any questions?”

\* \* \* \* \*

Of course, there were a lot of questions. Some people wanted to know more about the Artilect project. Others wanted to know what planet they were going to and what life would be like there. Most people seemed fascinated, although a few were upset that they had so little time to make such an important decision.

Still, Victor didn't blame the Board. Dr. Mazatl was right – if they were going to leave they had to do it quickly and quietly. The more time they lingered, the more trouble could arise. The Board could not allow the risk of this leaking out. The *Vanguard* wasn't built for battle, and there were still military ships on Xanthe that could easily destroy her. If the Rangers found out what was going on, they might try to track down the employees who were fleeing their systems and stop them. Time was not on their side.

After the last question was asked and answered, Dr. Mazatl stepped down and allowed the people to talk among themselves. Victor had already made up his mind; he was eager to get started on the Artilect. *That is the future, and I want to be a part of it.*

\* \* \* \* \*

Sixty minutes after the meeting began, the decision was made. In the end no one wanted to be left behind. There were people who were unhappy about leaving Xanthe, but they realized that all their friends and coworkers were going on the trip and they didn't want to spend the rest of their lives alone. They *especially* didn't like the idea of living outside the security of the Diano Building.

“It would be suicide to stay,” Victor overhead one employee say. “If people ever got tired of the Vaults and decided to go back to their old lives, we would be in a world of hurt. Living in Star City is madness.”

“You just can't trust the outsiders,” another employee agreed. “No, I'm afraid that the Board has got us right where they want us. We're going to have to go on this trip whether we want to or not.”

So, on March 1, 2422, the *Vanguard* left orbit around Xanthe at 11am and began flying through the Tau Ceti system. Fifteen minutes later it exited the Gate and started its six-month voyage across the galaxy.

The Corporation would be kept busy on the long voyage. Everyone was about to be given a crash course on artificial intelligence. Dr. Mazatl wanted to spend the voyage educating the employees, so that when they arrived at the planet they could get right to work. It would be a bit odd working on a moving starship instead of in a building, but Victor figured that in the end it wasn't really that different. *A room is a room, whether it's in space or on a planet.*

\* \* \* \* \*

Three days later, Adrian Garza burst in to Carroll Lane's office. "They're gone!" he exclaimed.

"Who is gone?" Lane asked. "Was there someone here to see me?"

"The Corporation is gone. There's no one left in the Building! Everyone has vanished."

Lane laughed. "That's preposterous! Where could they possibly go? They've been in that building for generations – centuries, actually. It has all of their equipment and houses all of their employees. What you are saying is impossible."

"I'm telling you *they're gone*. No one in that building is answering their calls – no one. No one has been seen exiting the building in three days."

"Maybe they just don't want to be bothered. Maybe they're busy or something. After all, the building doesn't have windows, so you can't prove they're not there. And there's no need for them to leave the building anymore anyway. The Corporation just spent months automating the maintenance of—"

Lane suddenly stopped. "Hold on. They just automated *everything*, didn't they? They spent months making sure that the planet could continue to function without them. It was a huge effort. I heard that thousands of employees worked on it."

"Exactly. Why would they do that if they weren't planning on leaving? They never bothered to do it before. Why now?"

"That's a good question. But tell me something. Have you tried actually entering the building and looking around?"

"I can't get in the building anymore," Adrian replied. "My access code doesn't work anymore. I think we've all been locked out."

"Now that's a bit odd. Why would they leave without telling us?"

"Why would they leave *at all*?" Adrian asked. "Isn't Xanthe their home?"

"Well, not really, I suppose. The Corporation has been prisoners in their own building for years. Now that I think about it, if I was Dr. Mazatl I'd certainly want to go somewhere else. In fact, why *wouldn't* they leave? They've spent centuries terraforming planets and creating new colonies! That's the *whole point* of the Nehemiah class of probes. It makes all the sense in the world for them to leave Xanthe and go to one of the new colonies they created."

"But isn't that bad for us?" Adrian asked. "Don't we need them here?"

Lane shook his head. "People live in the Vaults now, remember? Sure, they still go home every week, but one day they'll live in the Vaults forever. When that happens we won't need the city's infrastructure. I'm sure the automated repair bots the Corporation created can handle running the city for another five years or so."

"But what about our own equipment? Don't we have to maintain our Vaults?"

"Sure, but that won't be hard. Thanks to Victor, the technology to maintain them already exists. It's a solvable problem. In fact, why don't you go ahead and put people to work on it? Might as well get it taken care of."

"I'll do that," Adrian promised. "There's just one other thing I'm concerned about."

"What's that?"

"How did the Corporation manage to leave without being seen?"

Lane shrugged. "Who knows? They probably have all sorts of secret technology. I wouldn't worry about it. Now that they're gone that's one less thing to worry about. The people of this world

have just been given another reason to come and live in our Vaults – which is a good thing. We're the only show in town now.”

“Which brings us to the matter of exports,” Adrian said. “I know I've mentioned this before, but the Vault technology is in high demand. It would sell very well on the other Ranger worlds. If you would allow it to be exported, I have no doubt that it would be as successful elsewhere as it is here.”

“But I don't care about other worlds. I built Vault 37 primarily for myself. Since I'm generous I'll agree to invite in a few other people whom I believe are worthy, but that's as far as I'm willing to go. The Ranger colonies have never done anything for me; why should I do anything for them? Even if they tried to buy the technology the only thing they could offer in exchange are things that I don't actually want. There's no conceivable reason to help them.”

“Your technology is in high demand,” Adrian repeated. “Very high demand. What are you going to do if people try to come here and take it by force?”

“We're protected by a Wall,” Lane pointed out. “Its whole purpose is to keep people out. But, fine. If exporting the technology will get them to leave us alone then it might be worthwhile. But I'm *not* going to give them the best version of it that will extend their lives for thousands of years. They don't deserve that.”

“So you *are* going to approve an export license?” Adrian asked.

“Once the technology works,” Lane replied. “Right now we're probably five years away from achieving the perfection I'm looking for. Once the Vaults can become the permanent home of mankind, you can sell it to whoever wants it. But not until then.”

\* \* \* \* \*

For most of the people on Xanthe, life continued on much as it had before. Carroll Lane continued to work with his team to perfect the nanites, which he believed was the only way to make it possible to live in the Vaults forever. The people of Xanthe continued to spend their lives in the Vaults, living out their fantasies. Society lost all interest in the physical world. The planet continued to be maintained, but only because the Diano Corporation automated all maintenance processes. Only the robots cared about keeping the city running; no one else was interested. The only thing the citizens of Xanthe cared about were their synthetic worlds – and how quickly they could get back to them.

But there was one man who still cared, and that was Professor Grimes. When the Corporation left he lost his only ally – but he didn't feel alone. Thanks to modern communication technology he was still able to talk to the people on board the *Vanguard*. It was true he could no longer visit them in person, but it was something.

The robots continued to maintain Star City University, but no one paid any visits to the campus anymore. Grimes was now the university's sole occupant. The professor, though, did not spend his days wishing that things were better. He was far too busy.

Three days after the Diano Corporation left, Professor Grimes placed a long distance call to Tony Morton. Tony was a former student of the professor. He lived on Alpha Centauri A, which was the first colony ever established by the Diano Corporation. It was an old world that was filled with people – but like all the Ranger worlds, it was slowly dying. Neglect and apathy were taking their toll.

“Good evening, Tony,” the professor said, as soon as the two were connected.

“Why hello, professor!” Tony replied. “This is certainly a surprise. I haven't talked to you in ages. To what do I owe this pleasure?”

"It certainly is good to talk with you again. There is a lot that needs to be said, so I will get right to the point. I need your help. You see, a momentous event has occurred. The Diano Corporation has evacuated all of the Ranger worlds and will not be coming back."

"Interesting. That is certainly news to me! It makes sense, though. The Corporation has only had a skeletal presence here for a long time now, and I *did* notice that they've been automating a lot of systems lately. I guess they were preparing to leave."

"That is correct. Dr. Mazatl has released the automated repair bots to all Ranger worlds in order to ensure the future of mankind, and has given the order to evacuate every single Diano installation. The maintenance bots make it possible to leave the Ranger worlds without dooming them to extinction. As we speak, ships from the other worlds are traveling through space to meet with the *Vanguard*, which left Xanthe three days ago. In a few days everyone will be on board, and every last Corporation employee will be gone from Ranger space."

"Well, good for them. I'm glad they are finally going out and accomplishing their dream. They've always wanted to colonize the stars. But I'm not sure how this affects me."

"Have you heard of the Vaults?" Professor Grimes asked.

"Of course! To be honest, though, they've always sounded too good to be true. These supposed synthetic worlds of Carroll Lane can't possibly be as good as people claim. I think they're just a lot of hype."

"You are mistaken. The Vaults are very real, and they are every bit as functional as you have heard. When you are in a Vault you cannot tell it apart from the physical world. It is a flawless simulation – except for the fact that in a Vault the world can be whatever you wish it to be. You can create any fantasy, fulfill any desire, and do whatever you please. You have absolute control over your world."

"Oh," Tony said, surprised. "Really? That technology actually exists? But if that existed, wouldn't everyone move in and never leave?"

"Do you not pay attention to the news?" the professor asked. "That is *exactly* what has happened in Star City. The entire population now spends all of their time in Vaults. The streets are empty and the buildings are deserted. Star City has become a ghost town. People have stopped caring about the physical world altogether and only care about their fantasies. How have you not heard this?"

"We don't really get much news from Tau Ceti," Tony explained. "After Lane assassinated Rios you sort of dropped off the map."

"How foolish of me. Of course you have heard no news! How would you have heard it? Now that everyone spends their lives in Vaults, there are no people left to create news reports and send them to other star systems. I guess that leaves it up to me to craft some news bulletins and dispatch them to the stars. There is much that the Rangers must be told."

"So your planet is deserted?"

"Certainly. The Vault technology is very powerful. Why live in the real world when you can inhabit your fantasies? Now, it is true that the technology is not perfect. A person can only stay in a Vault for a week before they have to come out and rest. However, Carroll Lane is working on removing that limitation so that people can live in the Vaults *forever*. He wants to replace the physical world with the Vaults."

"Will that work?" Tony asked skeptically. "I mean, people can't have children in the simulation, right? If Lane got his way then wouldn't that mean the current generation is the *last* generation?"

People would spend their lives in their fantasies and then die. Why, if all of mankind moved into the Vaults then they would all die! It would be a disaster.”

“It certainly would. We have been fortunate so far because Lane has refused to allow his technology to be exported, but I do not know how long that will last. That is why it is imperative for us to meet with the Ranger governments and convince them to pass laws outlawing Vault technology. If it is not banned then it will be the end of mankind. It *must* be stopped. This has the potential to do far more damage than the ZPEs ever did.”

“I see your point. This certainly does seem important. But how are you going to get the governments to ban it? This seems like exactly the sort of thing that everyone would want. You have to realize that people don't work for a living anymore. All people do is lay around their homes, do nothing, and have their every need taken care of by machines. ZPE technology has turned everyone into mindless zombies. *Everyone* is going to want Vault technology. Trying to get it banned would be like trying to outlaw a genie who grants endless wishes. No one is going to support that.”

“I realize that,” Grimes replied. “The true solution is to make everyone disciples of Christ. If they had a change of heart then they would no longer desire the Vaults at all. They would want to live in the *real* world and do *real* things. After all, we will be judged by God for what we have done in this life. He will not want to hear that we have spent our entire life doing nothing but fantasizing. We have been given a mission and we ought to be about our Father's business.

“But I also realize that we cannot preach the gospel to men who are in the grave, and if we allow this technology to continue it will put an end to the human race. Therefore, to buy us time, we need to create something else for people to focus on. We need to create an incentive for people to work again. We need to show them the utter hollowness of the virtual world and remind them that the physical world matters.”

“How do you propose to do that?” Tony asked.

“I am not saying we should stop our missionary efforts. It is *imperative* that we continue to preach as long as we can. We may not be saving very many souls, but there are some who are responding to the call, and that matters. But I think we can offer society something more wholesome than a synthetic world. Are you familiar with the Nehemiah IV class of probes?”

“Somewhat. Don't they go out and terraform worlds?”

“They do indeed. In fact, each Nehemiah IV probe has its own ZPE. It has the tremendous ability to modify the *real* world to whatever we need it to be. It can sculpt continents, create oceans, change the orbit of planets, alter the chemistry of stars – and can even build cities. In other words, the technology in the probes allows much of the same control over the *real* world that the Vaults give people over the purely synthetic worlds.”

“Where are you going with this?” Tony asked.

“It's quite simple. Lane offers people a virtual world – a fantasy. But why have a fantasy when you can have reality? The real world is not some static thing that is immovable and unchanging. Thanks to modern technology, it can be whatever we want it to be. We don't have to live in dark, dismal, ruined cities – which is what people have been doing for more than a hundred years. We can build ourselves a new future. Instead of pining away for a make-believe world, we can change the world that we live in. We need to convince people that the fantasies of the Vaults aren't worth having – they're not real, anyway. What they should be doing is looking to change the world around them. They need to get re-engaged to reality.”

“So you're saying we can offer them something better than the Vaults. Something real.”

“Exactly! If we can get people working again – if we can engage them and get them to go outside of their homes and actually *do* something – then perhaps we can break through to them. The thing about reality is that even with the tremendous power of the Nehemiah probes, it still has limitations. The problem with ZPEs is that people don't run against those limitations anymore. Instead they just sit around in their homes and grumble that the machine that gives them free stuff isn't giving them all the free stuff they want. I *want* people to become engaged again. I want them to see the limits of existence. I want them to realize its problems and its inability to truly satisfy – and I want to use that to bring people to Christ, who alone can satisfy. But we've got to get people to start doing things again.”

“So you want to give people a dream, and when that dream fails you want to use that to explain the gospel.”

“Precisely. I have it on good authority that Lane hopes to perfect his Vault technology within the span of five years. We have that long to awaken the world around us.”

“It's worth a try. How do you think we should begin?”

“I've already begun,” Professor Grimes replied. “Months ago, when the Corporation made the decision to leave Xanthe, I obtained permission from Dr. Mazatl to divert a Nehemiah IV probe back to Tau Ceti. They have more probes than they can manage right now, so they didn't mind giving one up. It is on its way and will arrive here shortly. I propose that we begin contacting the leaders of the Ranger worlds and tell them that we have obtained some exciting new technology – technology that can radically alter their worlds and bring them into a new era.”

“Now *that* should get their attention. But I'm still not sure this is a good idea. One thing you taught me in class is to always consider the worst possible outcome. It's fine to look at a choice and consider the great things that might happen, but that must be weighed against potential abuses and disasters. You are offering reality-altering technology to people who have no moral code. Isn't it possible that they will use the probes to do even *less* work and become even *more* corrupt? What is going to prevent them from trying to live out their fantasies in the real world instead of a virtual one?”

“Nothing,” Grimes said. “That may well be what will happen. But even if that comes to pass, it will still be an improvement. As long as mankind is living in the real world, that means they will continue to have children and the race will survive. There is also the fact that the real world comes with consequences. If people make poor decisions, they will suffer – and that will be a teaching opportunity.”

“I suppose you have a point. This just seems like something that could end rather poorly.”

“If it prevents the human race from dying out then it will be a step in the right direction,” Grimes said. “Are you ready to get started?”

“I'll do whatever I can to help,” Tony said. “What do you need me to do?”