CHAPTER 10: INVESTIGATION

Log date: August 1, 9991 of the Eternal Era
Location: The *Vaugn*
Log note: Data does not speak for itself; it must be interpreted

IT WAS A FULL WEEK before Monroe and Merlin could begin their exploration of the *Vaugn*. Both of them were in the middle of other tasks, and they had to bring those efforts to a temporary conclusion before they could travel 9 billion light-years across the universe. It was difficult for them to put their other adventures on hold, but neither of them wanted to miss this opportunity. The discovery of the *Vaugn* hinted at the existence of an entire undiscovered civilization – and that was an exciting thought. No one could predict what wonders they might uncover.

During the course of that week, the rest of mankind learned about Noel's surprising discovery. Each day of this Era brought new surprises and discoveries, but the *Vaugn* was in a category all its own. Since it was a simple matter for the Redeemed to step across the universe, many people flocked to see this unusual and unexplainable starship. They were careful not to board the ship (for they did not want to interfere with the ongoing investigation) but they did gaze at it from a distance with a mixture of awe and wonder.

The press advanced a number of different theories. The *Hyde Bulletin* proposed that the ship was a derelict from the old universe that, thanks to the Stryker Singularity, had somehow survived. The *Prentice Observer* made the argument that the vessel was a time travel experiment from the distant future. The *Colton Pioneer* suggested that perhaps it was a new life form – not a ship at all, but a creature that lived in the void between the stars. By the time Monroe and Merlin reached the *Vaugn*, mankind was engaged in a lively debate. People were eager to follow their work and hear the conclusion of the matter.

On August 1, the two men made the jump from Xanthe onto the bridge of the *Vaugn*. When they arrived there were no other ships in sight – but they knew that interest had not waned. Mankind had an enormous attention span, and were not distracted so easily. The citizens of the universe were simply giving them some space to work.

"There's a lot of eyes on us," Merlin remarked. "It's a bit of an odd feeling. There's not usually this much attention attached to my research. Why, I once worked on a research paper for fifty years before anyone ever heard about it. I prefer to have my conclusions tested and well-documented before releasing them to the public."

Monroe took a moment to look around before responding. The interior of the ship was as empty as ever. It looked like there was nothing to be seen – but he found that difficult to believe. *There must be something here; there always is. The trick is learning how to see the thing that no one else can see.*

"Such as your paper on the Wall around Sol," Monroe said aloud. "In the old universe your approach was a sound strategy. Any conclusions that you released would be viciously attacked – which is something you experienced firsthand. It made sense to proceed with great caution. Your careful study and detailed proofs made you the greatest scholar of your day. But we live in a new era, Merlin! No one in all of creation wishes to attack you. Instead, everyone wants to *help*. You could stop any

random person in the street and ask them for aid, and they would do whatever they could to assist you. These are not bad times; these are the best of times. By all means, let the universe watch. Perhaps they will see something we have overlooked. Their attention can only help our cause."

Merlin laughed. "Perhaps you are right. At any rate, this is not an investigation that can be done in secret. I do not know what we will learn; only time will reveal that. But it is quite possible that we will learn something unexpected. God has filled His universe with all sorts of surprises."

"Quite so. Let us not waste any time, then! Where should we begin?"

"By collecting data, of course!"

"Shouldn't we form a hypothesis first?" Monroe asked. "The press has proposed multiple possible theories. If we start with an idea then we can form tests to evaluate the idea. That will guide us in our study of this vessel."

"But at this point we don't know enough about the *Vaugn* to form a plausible hypothesis," Merlin pointed out. "We need to collect as much data as we possibly can. Once we have a large body of evidence, we can go through what we've learned and analyze it. That will give us a solid basis for forming a hypothesis. Any path we chose at this point would simply be a random guess that had no particular value."

"Perhaps you're right. At any rate, it won't do any harm to perform a detailed scan of this ship. Noel's scan was a good start, but it was cursory at best. Let's start with that and see where it takes us."

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It took four days to complete the submicroscopic scan and create a virtual model of the *Vaugn*. However, unexpected discoveries began turning up on the very first day. To their immense surprise, they discovered that every part of the ship was created out of polymorphic nanites. Even the hull was not made of sheets of metal; it was instead a nanite construction. They also discovered that not all of the nanites were the same. The ones that formed the ship's hull appeared to be "parked" and inert.

"This is fascinating!" Monroe exclaimed, as the men examined the data. "It would seem that the civilization which built this ship used hypercomplex nanites as their base construction material. That is quite bizarre. When they needed to create something they simply manufactured a batch of polymorphs, had them assume whatever shape they desired, and then parked them in that finished form. That is a most unusual construction approach!"

"Unless this is a special project," Merlin pointed out. "This is the only artifact we have from this civilization, so it is difficult to draw conclusions. This may not be representative of the rest of their society. We have to be careful to avoid claims that are not solidly supported by the data. If there are valid alternate explanations then we must consider them with due care."

"That's quite true. I suppose this might have been an experiment, to see just how far they could take their nanite technology. Your sense of caution is sound. Yet, the scan reveals that these nanites are clearly quite advanced. This technology must have been perfected over a very long period. Any race that could create such complex micromachines must surely have developed basic metalworking first. They *must* have the knowledge to craft a hull through traditional means, for that is a vastly easier undertaking. But that is not what they did. The fact that they used *nanites* to create the hull surely speaks volumes. They must be used to creating things this way."

"You may be right," Merlin agreed. "Even though our data is limited, it does seem unlikely that this is their first attempt at using nanite technology on a large scale. If you are correct then the

civilization which made this vessel must be quite isolated. Otherwise they would have used our own nanite technology, which is vastly superior. We seem to be dealing with a culture that has had no contact with mankind. One wonders how that is even possible in this Age."

"Exactly. The Artilect has explored the entire universe. Until the discovery of this ship we all believed that the Nehemiah V probes found every single civilization in existence. Since the Artilect clearly did *not* find the civilization that built the *Vaugn*, that means there may be all sorts of things hidden out there. Do you suppose this unknown race is hidden behind some kind of Wall?"

"That is a rather large leap, based on the facts we know. First of all, there is no need for a Wall anymore. Our home planet Earth was imprisoned for the sins of the Spanish Emperor, but in this Age there are no sins or wicked empires. Governor Nicholas built a wall around Tau Ceti to protect that star system from evil, but in this Age there is no evil. There is simply no known data that would give a valid reason for any society, anywhere, to build such a protective device. It is true that the source of the *Vaugn* is unknown, but there are other possible explanations. Even time travel is a possibility."

"Really?" Monroe said, surprised. "*You* believe in time travel? Surely that is the least likely possible explanation!"

"At this point it is too early in our investigation to rule out anything. We do not know the full capabilities of the Stryker Singularity, and we do not know what technology will exist in the future. In order to exclude a possibility we must first have data. Since we lack data, we must keep an open mind."

When Monroe released their preliminary findings, the press greeted it with tremendous enthusiasm. The additional information fueled even more theories. Perhaps this was a ship from the old universe – an experimental prototype from some forotten colony. When Carroll Lane's swarms massacred the last Ranger world in 2469, civilization died – but a few people survived. Not everyone lived in the colonies; there were some who preferred to live alone and create their own future. It was thought that the swarms had tracked down all of these isolated settlements and wiped them out, but something could have been missed.

"It's certainly a possibility," Captain Max said, when the *Hyde Bulletin* asked his opinion. "You would think that everything from the old universe was gone by now, but the Singularity survived – and it's full of mysteries. Perhaps it somehow grabbed a ship from the past and brought it into the future. Or perhaps it found a ship in *our* future and brought it into the present. Who can say?"

The *Coulton Pioneer* asked Professor Grimes to weigh in, but he declined. He said he wanted to wait on the finished report before offering any theories of his own. "At this point we cannot rule out the possibility that the *Vaugn* was designed by a race of hyper-intelligent sea turtles in a quest to find a better brand of toaster. Since the facts cannot rule out even that ludicrous hypothesis, I believe it is best to wait and see what happens next."

Merlin, for his part, heartily agreed.

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The investigation of the *Vaugn* continued over the following months. Monroe used the Diano Corporation's computing grid to analyze the data that their scans had gathered. The analysis confirmed what they already knew – that the ship was made of two different types of nanites. Most of the interior of the ship was empty – a fact that they found highly suspicious.

"Perhaps the ship has simply been turned off," Monroe suggested. "When the ship is in active

mode, the polymorphs spring to life and fill the interior with all manner of machinery."

"You might be right," Merlin agreed. "That is one explanation of the data. But I have a nagging feeling that there is more here than we realize. The difficult part of any investigation is *not* the discovery of the obvious; anyone can do that. The trick, as you have said so many times, is to learn to see what no one else can see. It is easy to look at a box of puzzle pieces and see the pieces that exist. It is much harder to realize that certain pieces are missing – and harder still to know what those pieces would have revealed."

"True. Unless, I guess, you have the picture on the box. Or you've put the whole puzzle together and you can clearly see what is missing. But, of course, we don't have that. Instead we seem to have one puzzle piece and are missing the other 999."

"Which is exactly what makes our research so difficult. It is easy to draw conclusions based on a single puzzle piece, but it is highly doubtful that those conclusions are accurate. We need more data."

But not everything was missing. Some pieces were obvious – such as the ship's space drive. After four additional scans of the ship's interior revealed no additional information, the scholars turned their attention to the ship's propulsion system.

"I'm afraid this is not going to be easy," Merlin remarked, as the two men stared at a holoscreen that they had created on the ship's bridge. "I am not an expert in this technology, but it would appear that the *Vaugn* converts matter directly into energy and then uses that energy to power its spacedrive. According to the technological history department at Star City University, no drive system like this has *ever* been built. Even in the old universe no one took this approach to space travel. Dr. Logan was quite certain about this. There is no mention of this class of drive system in any historical document."

"Well, yes and no," Monroe said thoughtfully. "It's true that a ship's *spacedrive* never operated on those principles. But I seem to recall Victor Stryker telling me that in the old universe he created a bunch of probes that did something like that. They consumed raw matter and used it to replicate themselves."

"Certainly. Lane later stole Victor's basic design and used it to create the swarms, which killed everyone who was not in one of Lane's wicked vaults. But that is not quite the same thing. Using matter for replication is an idea that dates back to the very first replicating probes launched by Timothy Stryker. Using it to power a ship's drive, though, is different. No one ever did that because there was always a better approach to take. That is still true today."

"Which is more evidence for an isolated culture."

"I tend to agree. The data does point in that direction. But why does the ship remain at a fixed point in space, relative to the position of the Stryker singularity?"

"Exactly. Why is the ship parked here, twelve light-years from the anomaly? Why is it not closer? Why is the ship abandoned and yet still holding this position? What purpose does that serve?"

"If we had the data needed to answer those questions then we might be able to unravel this whole mystery," Merlin remarked. He pointed to a portion of the projected engine diagram. "Do you see that section? That is clearly the fuel area. The nanites in the fuel container are extremely basic – raw, if you will. The fact that they are converting *nanites* directly into energy supports the hypothesis that nanites are the basic building blocks of this race. It makes no sense, given how wasteful it must be to convert incredibly complex micromachines into energy, but that is where the data points. Why they do not simply throw some dirt or rocks into their conversion chamber is truly baffling."

“Unless nanites are plentiful. Perhaps they simply grow them. For all we know it may be that rocks are in short supply. Do you remember the world of the Watchers? There may be limitations in play that we are unaware of.”

“Now that is a stirring thought. Perhaps we are making too many assumptions about the nature of this civilization. The Artilect was designed to look for races that were more or less like our own. We may be dealing with something quite different. That could explain why they were not found. What if the world is there but we simply cannot see it? In the old universe angels went about doing the will of God, but even the saints could not see them. Yet they were there all the same.”

Monroe stared thoughtfully at the holoscreen. “You know, the fuel converter may be the clue we've been looking for. We can see the size of the fuel container, and we can also determine its current fill level and the rate of consumption. Can we use that information to determine the ship's age? It should be a simple math problem – we just need to find out how much matter has been consumed and then divide that by the current fuel usage.”

Merlin shook his head. “That methodology would not be valid. We don't have any data on how much fuel was in the tank to begin with; the ship may not have left with a full complement. We also don't have any data on how much fuel was used before the ship was parked here. The ship may have been flown throughout the universe for years, using vast amounts of fuel, before it finally made its way here and was parked. It's simply not valid for us to assume the starting quantity or extrapolate the current usage into the past. The available data simply will not allow it.”

“I suppose you're right. But it would be nice to know how old the ship is.”

“It certainly would. What we need to do is find a way to access the ship's computer – if it has one. There may be data there that we could use to date the ship. Star charts would be enormously helpful; since stars move, we could use old charts to determine the date on which the charts were made.”

But their attempt to locate the ship's central computer were not successful. The only other device that was found on board the ship was a communications system – and even that was questionable.

“Are we sure that it is intended to send and receive messages?” Monroe asked.

“It's hard to say,” Merlin replied. “It is certainly an unorthodox approach to communication, and it is difficult to see how it might work – or if it works at all. There is no obvious unit for sending or receiving. But the Corporation's computer analysis indicates that communications is the most likely functional match, and I am inclined to agree with them. At this point that is what the data indicates.”

“Perhaps that is the answer, then. The *Vaugn* could have been built to serve as a communications relay. It was flown here and parked in this position, and then all other equipment that might consume power was removed. Its purpose is now to relay messages. That would explain why we can't find anything else on board.”

“But where is it getting the messages from?” Merlin asked. “And where is it sending them to?”

“The singularity, perhaps?”

“That seems highly unlikely. According to Dr. Philip Crane's extensive analysis of the singularity, it is impossible to send a message through the singularity. Space and time are broken there and do not permit transit of any kind. Now, it may be that his research team came to an incorrect conclusion, but so far his paper has stood for a thousand years. No one has been able to disprove his claims.”

“And yet, all we know about the singularity is what we see on *this* side,” Monroe pointed out. “There may be another side to it that we cannot see, and conditions might be different there. Perhaps

it *can* be breached from the far side – from some point outside our own universe. The race that built the *Vaugn* may have flown it here in order to relay messages through that anomaly and into our space."

"If that is the case then were is the supporting evidence? Where are the messages and the ship's crew?"

"Perhaps there was never a crew at all. This may be all there has ever been."

"But there's no control system here! I don't even see a navigation system on board. How did the *Vaugn* get here?"

After several days of further study, the men came to a conclusion. "There *must* be something missing from this ship," Merlin said firmly. "There has to be a way to manipulate the nanites into creating shapes. This ship needs more equipment than it currently carries, and the nanites were designed to reform into other shapes. What we need to do is learn how to control them. It may be that if we can turn the nanites on, the ship will become full of equipment and our questions will be answered."

"But that is going to be a very difficult task," Monroe replied. "We have a detailed scan of the nanites, but that's not at all the same thing as understanding how to use them. Learning their operation is going to be a serious research project. It is too large a task for us – especially given that we are not experts in that field."

"So what do you propose?"

"I think it's time we brought this problem to a talented group of bright minds. And I know just where we can find them."

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In the Eternal Era there was no shortage of amazing news stories. After all, the universe was a place of endless wonder. Its perfection, holiness, and design reflected the God who had created it. There was a time when the news reported by the media was full of evil and corruption. In the old universe, being a reporter was synonymous with being a liar. Men such as President Rios wielded the media as a weapon. But those days were gone and better days had come.

Even though there was a great deal going on, the news of the *Vaugn* had not been lost. People were still eager to hear the end of the story. Where was this missing civilization? Who were they? How did their existence bring glory to God? Nothing quite like this had ever happened before. The story had people's interest – which Monroe was counting on, because he wanted their help.

It was not easy to meet with the president of Star City University. There were millions of people who wanted a moment of his time, and he could not meet with all of them. God could be everywhere at once, but men were limited to just one place at a time. Yet Professor Grimes was very willing to meet with Monroe and Merlin on board the *Vaugn* and hear what they had to say. When he heard their plight he immediately agreed to help.

"I can certainly see your dilemma," Grimes told them. "You need a great deal of technical work to be done by a team of very skilled people. I'm quite grateful that you came to us! I'm sure the Diano Corporation would have given you any resources you needed – this is the sort of problem that Ramon loves – but these nanites represent a fantastic educational opportunity. Students are rarely given the chance to explore alien technology. They will embrace this challenge with tremendous enthusiasm!"

"That was my thought exactly," Monroe agreed. "How soon do you think they can begin?"

“That's a good question. As I am sure you know, the fall semester has already begun. I don't want to distract the students from their current course load; they have already made commitments. But we have another semester right around the corner, and more semesters after that. Now that I have a copy of your data, I can meet with the department heads to turn your engineering problem into course work. All engineering students are given projects to work on, but they are usually not quite as exotic as unknown alien technology. I think we can have everything in place to begin work in January of 9992.”

“Excellent!” Monroe exclaimed. “That will give us an opportunity to resume some other work that we've had to put on hold. Of course, when the semester starts we will make ourselves available if anyone needs help or advice. But I'm afraid we are not technical specialists.”

“You don't have to be. Our talented crop of engineering students will handle that. Once you come to the school, explain the problem, and introduce your findings, the learned professors should be able to handle things from there.”

“That will not be a problem,” Merlin replied. “I've already begun creating a thorough report of the data we've gathered. I will be ready to present our findings. The goal of the students should be to learn how to operate the nanites. We need to know how to turn on the *Vaugn*. At the moment it is a relic; it needs to be transformed back into a functional starship.”

Instead of responding, Grimes looked around the room for a moment. He then glanced back at the holoscreen that was displaying a detailed schematic of the nanites. “I have been following the reports in the press. As usual, the media has been very thorough and very accurate. It is my understanding that this ship is currently holding its position in relation to the tear in space that Victor Stryker created. Is that correct?”

“Certainly,” Merlin said.

“If this ship has been 'parked', so to speak, then its builder must be using it for something. There are no fools in this universe, you know. This ship was put here for a reason and it is carrying out its intended design. Therefore, despite its appearances, the ship is *not* empty and it has *not* been turned off. There are no missing pieces. Everything we need is right here.”

“Of course,” Monroe said. “The nanites are everywhere. We just need to learn how to turn them on.”

Grimes shook his head. “What I am saying is that we are only seeing half of the pieces. There is more at play here than polymorphs, and I suspect we are failing to see something of great importance. For example, as you no doubt know, there are some species who cannot distinguish between the colors red and green. If you show them a red sign with green text, they will not be able to see what is written. To them it is all the same. I think your real problem is that we are, in essence, colorblind. We are a technical race, so we see the things that we are used to seeing. But I do not think we are seeing the whole picture.”

“I don't understand. We have the best scanners on the market! We can digitally reproduce the nanites on an atomic level. What could we have possibly missed?”

Grimes smiled. “Nothing. Or everything. I do not know, gentlemen. I am only saying that learning how to use the nanites may bring up more questions than it answers.”

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In the winter of 9991, word reached the student body that Monroe and Merlin needed help

learning how to use the polymorphic nanites from the *Vaugn*. The response was immediate – and intense. Thousands of people rearranged their January class schedules in order to participate in this grand adventure. The next year simply could not arrive fast enough. Grimes dedicated six research laboratories to the nanite research project, and provided equipment that could fabricate them on a large scale. When January finally came the engineers went to work – and immediately hit a wall. The nanites were inoperable.

It was a strange problem. The scans that Merlin had made were perfect; no one doubted them. The structure of the nanites was elegant and reflected a brilliant design. Additional scans were made, and the results always came back the same. Yet, the nanites simply didn't work. In fact, they *couldn't* work. They were missing pieces.

As the months went by the engineers eventually realized that the nanites were missing a very specific piece – the command module. Each nanite should have had a component that received the command to morph and then transmitted that command to its internal machinery, but it didn't. The transformation mechanism itself was there. The engineers were able to add an artificial command mechanism to the nanite design, and when they sent it commands the nanites immediately responded. The nanites worked, but they were incomplete.

Or it *seemed* that they were incomplete. In the summer of 9992 a crew of students spent two weeks on board the *Vaugn* running experiments. They eventually found a wireless frequency that the nanites would respond to. By sending a string of commands, they could coax the polymorphs into creating a variety of shapes. They proved that if the command contained enough data the nanites could form virtually any object. But this system only worked on board the *Vaugn*. It did not work with the nanites that were created from Merlin's scans.

As an experiment, a team removed a batch of nanites from the *Vaugn*, relocated them to the school, and tried the experiment there. To their immense surprise, the nanites responded. This meant there had to be a difference between the artificial nanites and the real ones – but repeated scans failed to turn up any differences.

When the winter of 9992 came around, Monroe and Merlin decided it was time to shift focus. “We have acquired a great deal of new data,” Merlin commented, as the two men walked down a hallway in Star City University. “We now know how to manipulate the polymorphic nanites. That part of our theory has proven to be correct. However, we also know that the nanites themselves do not contain any intelligence. They do not know how to form a chair or a table. In order to create an object they need a detailed set of commands. They have to be *told* how to create that object. That information must come from an external source.”

“Which is a difficult problem,” Monroe commented. “As far as we can tell, the ship has no such source.”

“Or it does have that source and we simply haven't found it. After all, the nanites from the ship do not behave the same way as the artificial ones, even though scans reveal no differences. This indicates that there is some technology at work that we cannot detect.”

“That doesn't seem possible!” Monroe protested. “If it's there then surely we could see it.”

“Yet the fact remains that it *is* there and we *cannot* see it. The data is quite clear on that point. We don't even have any theories about how this invisible mechanism might work. Is it a new particle? Is it new physics? Is it some trans-dimensional object? No one knows. That is why I believe it is time to take a new approach.”

“What do you think we should do?”

“It's quite simple, really. The one system we *have* found on the *Vaugn* is a communications system. We have very little data on it, but the ship can apparently receive messages. Therefore, the logical thing to do is to send the ship a message and try to talk to its creators.”

“But what sort of message is the ship waiting to receive?”

“It is impossible to know. I believe it is time for rigorous experimentation. We will simply have to try a wide range of options and see if any of them trigger a response.”

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So, in January of 9993, the talented engineering majors at Star City University began their analysis of the communications equipment on board the *Vaugn*. The results were even more perplexing than their nanite discoveries. Scans of the communicator revealed that most of the machine was simply missing. The device could process messages, but the electronics that were responsible for actually receiving the message was missing. By the time the message made it to the communications equipment, it had already been captured and decoded by some mysterious, invisible machinery. This mean the engineers had no idea what sort of message the *Vaugn* was searching for.

The equipment for sending a response was likewise absent. The machine simply handed the data off to a pathway that went nowhere. There were no circuits for message encoding or transmitting. It was a baffling situation. This only added more evidence that the *Vaugn* had technology that had not yet been found – but months of effort failed to find it.

When the summer of 9993 came, the engineers decided to try a different approach. They generated billions of different types of messages and beamed them to the *Vaugn*, using different encoding techniques and sending mechanisms. They attempted radio wave communication, subspace communication, and every technique that was registered in the Diano Corporation archives. They even invented a variety of new approaches. But none of their attempts generated any sort of response from the *Vaugn*.

At the end of the fall semester the student body presented their findings to Monroe and Merlin. The two men thanked them for their tremendous help.

“A negative result is still a result,” Merlin remarked, after the students had left their spacious office on campus. “I admit I was hoping that the communications test would work, but this is new territory. We cannot expect this to be easy.”

Monroe nodded. “Given the scope of message technologies that were attempted, I find it difficult to believe that *all* of them were failures. The *Vaugn* should have picked up at least some of them – and I think it very well may have. It is possible that we have made another error. We have assumed that the *Vaugn* would respond to any message that it received, but that is probably a mistaken assumption. After all, the universe is filled with a staggering amount of messages. Any machine that tried to respond to all of them – or even a significant number of them – would break down very quickly. I think it is far more likely that the *Vaugn* is looking for a very specific message. It may be a message from a particular source, or perhaps a message that is specifically addressed to the ship itself. It may even be searching for some key that we are unaware of.”

“That does sound like a reasonable conclusion,” Merlin agreed. “Perhaps, so to speak, we simply did not find the 'magic word'. If that is the case then we could spend a thousand years transmitting test messages and not come any closer to an answer. Therefore, I believe we need to

change our approach. We know that the *Vaugn* exists and that it is here. This means that it is quite likely that the ship's inhabitants are here as well – either because they are actually from our universe in the first place, or because they traveled here through the Singularity. If they *are* in our universe then we should be able to find them. Perhaps, instead of studying the ship itself, we should start to searching the area around the ship for clues. There must be some trace that we can find."

"But hasn't the Artilect already searched this galaxy? The Nehemiah V probes have put an outpost in every star system and on every planet. If any aliens had moved in we would already know about it."

"True," Merlin said. "But the Artilect is not all-knowing. As you pointed out, it has only put outposts in star systems. The machine does *not* scan the area *between* star systems. There could be a thousand deep-space outposts in existence and we wouldn't know anything about them."

"I see what you mean. But even so, scanning deep space is an enormous task! This galaxy is fifty thousand light-years across. If we wanted to explore every cubic mile of the space between the stars, we would need a staggering amount of equipment to do so. That sounds like a task for the Artilect – and I am not an administrator. Are you suggesting that we ask for its help?"

"I suppose you are right. The exploration of the void would be a daunting task. I am sure we will need the Artilect's help before the end, but I am hesitant to request its time until we have exhausted our other options. Perhaps there is another, simpler test that we could carry out that does not require such an enormous investment of resources. Consider this: we have access to this ship, and we also have access to the communications system. It would be a simple matter to add a small device to this vessel that would monitor that system and alert us the moment it became active."

"I see what you're getting at," Monroe replied. "That's a terrific idea! Why, we should have done that from the very beginning. If the ship does receive a message we can copy it and decode it. We could even add our own communications equipment to detect any incoming transmissions and outgoing messages – without interfering with the operation of the *Vaugn*. That way we could see what the original message was and where it came from, and we could compare that to how the *Vaugn* decoded it internally. We could also listen in on any messages that were transmitted. This could unravel the whole mystery!"

"Or it could lead to even more questions. But it is a starting point."

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On December 24, 9993 EE, Monroe and Merlin installed a new piece of equipment on board the *Vaugn*. The engineering students at Star City University had outdone themselves. If the ship received a message, the transmission would be saved and Monroe and Merlin would be notified immediately. All they had to do now was wait.

"This could take a long time," Monroe commented.

"That is quite likely," Merlin agreed. "That is why patience is such a crucial part of exploration and discovery. Even if we have to wait a thousand years, however, it is no matter. We have all the rest of eternity. In the meantime we have other matters to address. Both of us have had to place significant tasks on hold, and now we can get back to them. We will not be bored during our time of waiting."

Monroe laughed. "No, definitely not. Boredom is impossible to imagine. Look at all the opportunities that are around us! This is a momentous day. Today we begin listening for a message

from an alien race."

"The entire universe is listening," Merlin agreed. "You know, today is significant in another way as well. In the old universe, this day was celebrated as the day before Christmas."

"Was it really? Christmas was never celebrated in my time. Still, you were born a thousand years before I was. Did people celebrate it in your era?"

"Certainly not. By my time people had become too consumed with material things to rejoice in the advent of our Savior. It is not like it is today, when all of creation gives thanks for the infinite array of good things that our Lord has done for us. I would venture to say that Christmas was never really celebrated properly until this era."

"You are probably right. Christmas was never really about the calendar date, you know – although I know how much you love data and precision. It was really a matter of the heart. In the old universe we struggled with sin and corruption, and we were often blind to God's goodness and love. This made it difficult to praise the Lord as He deserved. But today all evil is gone. We can praise Him with perfect praise and rejoice in His holiness. We can truly celebrate our Lord's birth as it ought to be celebrated – and we can do it in unison with all of the Redeemed."

"Quite so," Merlin agreed. "So, in that spirit, and in spite of the date, I will wish you a very merry Christmas Eve."

Monroe smiled. "And a very merry Christmas to you as well, my friend."

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As Merlin had predicted, their plan did not bear any fruit for a long time. Weeks passed, and then months. Eventually the months turned into years. One year passed, and then another, and then another – and nothing happened. The *Vaugn* continued to sit there in deep space, waiting.

But the two men were patient. They knew that eventually something was bound to happen. Something would turn up, if they simply waited long enough. One day the *Vaugn* would receive a transmission, or it would move to another location, or its mysterious builders would board it once more. All they had to do is wait and see.

Then, finally, something *did* happen. On November 4, 9999 EE, their waiting paid off. The *Vaugn* received a message.