

Chapter Four

The da Vinci was one of the larger ships in what passed for the USSA fleet. It fit the standard model of the Fusion-Plasma design, in use for more than a dozen years. The crew and cargo space were contained in a large geodesic front pod, attached to the engine section by an open-framework spine. Just in front of the engines was a thick, protective dish, which shielded the crew compartment from any spillover radiation.

The crew complement was 26, composed of two shifts, each which worked 12 hours on, then 12 off. In addition to the human crew, there were three thin-film experts on board. One controlled the engines and their power plant. One managed life support and a small back-up fusion furnace. The other handled navigation and communications. All three experts were capable of managing all aspects of ship operations, and in fact each monitored the critical functions of the others. This redundancy was considered the optimum for safety and efficiency. In thirty years of spaceflight using this model, no ship had ever been lost due to computer failure or error.

The Fusion-Plasma system generated constant thrust. Even with the mass of the ship, cargo, and reaction mass for the engines, the acceleration of the ship was a significant fraction of one gravity. As currently configured, the engines were capable of full acceleration for about 10 days at maximum output. For routine flight between Earth and Saturn, the ship would accelerate for about five days, flip over, then decelerate for a little more than three. While this consumed a lot of reaction mass, it was the fastest means of travel, and maintained the sensation of partial gravity for the crew and passengers.

Jon was in his quarters, unpacking his things, happy to have even partial gravity again. He wasn't prone to space-sickness, but still he found it unsettling to be without gravity for any prolonged period of time. The room was small, efficiently designed. It reminded him of the private sleeping compartments still used in trains, for those people who either disliked flying or wanted to watch the landscape unroll before them as they rode the rails (well, more accurately, skimmed along the mag-lev line). A foldout bunk for sleeping, a comfortable bench for sitting which could be converted into a second bed if needed. A narrow closet at one end, drawers under the bench. The wall adjoining the next cabin and the narrow corridor outside could be retracted. If this were done with the walls to the four cabins off this hallway, a fair-sized room could be created. The ship was designed with six such clusters on the passenger level. Jon's team used two clusters, the military attachment used two. The remaining two were opened up, and served as common areas.

There was a tapping at the door. Sliding back the wall, he found Commander Navarr outside.

"Good evening," said the younger man.

"Well, hello." Jon looked around, wasn't sufficiently unpacked to have room for another person in his cabin, so he pushed open the wall more. "Sorry, I'm not settled in here yet."

"That's fine. I just wanted to stop by and welcome you aboard, see if there was

anything we needed to discuss.”

Jon raised an eyebrow. “We’ve been in pretty regular contact.”

Navarr smiled a little, rocked his head back and forth some. “Well, as a member of the military at my level, all my communications are automatically reviewed by an expert. And while I’m ‘on-duty’ my pc records both audio and video for daily download and review.”

Jon was surprised. “Really? I wasn’t aware of that. I mean, I know you guys have pinhead video pickups under the eyebrows, but I thought that was only for battlefield management.”

“Yeah, for the average grunt, that’s how they’re used; whenever a weapon is handled, it automatically initiates the recording. But command staff gets a greater degree of supervision.” He shrugged. “You get used to it. All they’re watching for are violations of security, or harassment of the troops. But so long as I’m not on a military facility, around other military personnel, using a weapon, or on-line, my life is my own.”

“OK. What’s on your mind?”

“Not much. Just wanted to get to know you a bit, see what you really thought of the artifact. Off the record, as it were.”

“Pretty much what I think of it on the record, actually: it’s too soon to know anything.” Jon considered a moment. “I figured I’d get my team together for brainstorming sessions while we’re en route to Titan. We don’t have a lot of hard information to go on yet, and won’t until the technical team gets into their analysis. But it won’t hurt to try and get a handle on the issues involved. Why don’t you join us? Your perspective would probably be a good one to have.”

“Sure. There isn’t a lot for me to do while we’re in transit. Routine stuff. My lieutenant can handle it.”

“Good.” Jon paused, looked closely at the man. “So, what do you think?”

“Of the artifact? I think we have to be very careful.”

“Oh? It hasn’t evidenced any threat yet.”

“Doesn’t matter. An anti-vehicle landmine won’t go off when you step on it. But bring a troop transport by, and it can kill a lot of people.”

Jon nodded slowly. “I definitely want you in on our discussions.”

“Thanks, but I checked your file. You saw fighting during the Restoration. You can figure this stuff out.”

“Yeah, but those are old instincts. And what I learned was mostly just practical survival. Not military science.”

Navarr snorted. “Give me ‘just practical survival’ any day. The generals can play games with theory; they don’t have to keep troops alive in the field.”

Jon smiled. “See you in the morning.”

He woke early the next morning, threw on a robe, went down the hall to one of the two small communal bathrooms and showered. After getting dressed, he climbed the ladder

down to the second floor of the ship. This was where the crew had their quarters, somewhat larger than the ones the passengers had. There was also a holo room and a small galley. A couple of members of the crew were there, finishing breakfast before they went on duty. He greeted them as he looked over the meal options, found something and popped it in the warmer. As he waited the few seconds until the meal was ready, the crew members left and Jackie Gates came into the room.

“Morning,” she said, though she didn’t seem to be too happy about it.

“You look a little rough this morning.”

“Like I said, I don’t much care for spaceflight. I can never sleep worth a damn in these little cabins.”

Jon got his meal out of the warmer, sat down to eat. Gates looked over the food options, decided on just fresh fruit, poured herself a cup of coffee, and sat across the narrow table from him, her back to the door.

“What’s up this morning?” She looked at him and sipped her cup.

“Well, I figured we’d get the team together, do a little brainstorming, just get to know one another a little bit.”

“Reasonable.” She sipped, bit into a crisp apple. After chewing it thoughtfully, she swallowed and asked, “So, what do ya think?”

“Of the artifact?”

“What else?” She took another bite of the apple.

“Too soon to say.”

She considered this, said nothing. Just then Arthur Bailey came into the room.

“Morning!” He was bright, full of energy.

Gates cringed. She looked at Jon, then just closed her eyes and sipped her coffee.

“Good morning, Arthur,” said Jon. “How’re you doing? Settled in?”

“Oh yeah. Man, I feel like a kid again.” He stepped to the food dispenser.

Gates opened her eyes, gave Jon a pained look. Without saying anything, she stood, gulped at her coffee and took another bite of the apple, dumped the remainder of both in the disposal and left.

Bailey watched her leave, turned back to make his own food selection. Over his shoulder he said to Jon, “Not exactly the effect I like to have on people.”

“Ah, don’t worry about it. She doesn’t like spacetravel, was feeling a little rocky this morning.”

Bailey popped his selection in the warmer, leaned against the bulkhead as he waited for it to cycle. Doubtfully, he said, “I’ll take your word for it.”

Jon suppressed a smile. “So, you enjoying yourself?”

“Yeah. I’ve been looking forward to getting out to Titan for a long time, as you know. The fact that this other thing has come up just makes it all that much more interesting.” He sat with his breakfast, started to eat.

“Well, glad that you’re enthusiastic about it. So, ready to get started?”

“I already have.”

“Oh?”

“Yeah, made some contacts with the crew.”

“And how does this help you? I thought you were specifically interested in the mining operation on Titan itself.”

“Oh, sure. But this ship, and the others like it, exist in large part because of the mining operation. Like the paddle wheelers that supplied goods to the gateway communities of the American West.”

“That makes sense.” Jon took a last bite, got up to leave. “I’d like to get everyone together later this morning, say about eleven, and do a bit of brainstorming about the artifact. See if we can come up with some preliminary ideas.”

“Sure, I’ve been thinking about it.” Bailey paused. “I guess we all probably have.” Jon nodded. “A pretty good bet, I’d say.”

He tapped into the ship’s system, “Raphaello?”

The managing expert appeared. Tall, blond, muscular. Wearing the standard jumpsuit that ship’s crew wore. “Mr. Thompson. How may I help you this morning?”

“I just wanted to download my messages.”

“Of course,” said the vaporous figure. Jon saw the file titles appear. “Anything else?”

Jon’s attention had been captured by the one title. “Oh, um, no. That’s all for now. I’ll probably have some correspondence to go out a little later.”

“Just let me know,” said Raphaello, who then disappeared from Jon’s view.

Curious, Jon opened the file which had caught his eye. Before him appeared the craggy face of Darnell Sidwell. In his slightly rough voice the old man said, “I hear you an’ yer people will be gettin’ here couple o’ days before the scientists. Good. Come an’ see me. Alone. There’s some things we need t’ discuss.”

That was it. No indication what he wanted to talk about. It wasn’t a request, but it wasn’t exactly a command, either. It was just . . . Sidwell.

Jon sat back and thought about the old man. His file was pretty skimpy, just general information on some of the places he had been in space, starting with the Israelis when they first colonized the Moon in the early years of the century, using heavy-lift conventional rockets. Sidwell had some role in finding and tapping the underground ice reservoir on the far side, helping to make the colonies viable. Then he was next known to be prospecting asteroids for them. Spent a little time on Mars, before the Japanese decided to make it their own. A while on Europa, when that settlement was still in its infancy. Eventually he wound up on Titan, in the first wave of gel miners.

Jon had met Sidwell briefly half a dozen years ago, when he first took over the position of USSA Outer System Admin. The old man was prone to fits of profanity. He drank too much. He even would occasionally smoke. He didn’t seem to care about much of anything, himself the least of all. Yet he was the oldest man Jon knew, or knew of, for that matter. He always seemed to be around, never aging. Oh, his hair was more white now than in the file photo from his Lunar colony days. He was thinner. But he looked old then. And

that was almost 40 years ago. Jon sent a simple response: "I'll be there."

Jon turned his attention to the other things waiting for him. A summation of office news from the Seth dup, routine reports mostly. A posting from Susan Jacobs on Titan Prime; no change to the status of the artifact. A note from Bradsen's team that they would be leaving Earth orbit in less than a day, on schedule. He answered the messages he needed to answer, then contacted each member of his team to make sure they would be present at the meeting later that morning.

The adults sat on benches in one of the common areas. Ling was laying on the floor on her stomach, the small holo projector activated. The miniature Seth, in his flowing robes of red and gold, was there before her, translating for her, entertaining her, working with her to help her learn English as the adults talked.

Jon introduced Navarr, explained the role he and his troops played in helping to provide security, without going into details.

"Well, I just wanted to get together and talk a bit, get to know one another, brainstorm." He looked around the room. "So, what do you think? What is this thing? What does it do?"

"What it is and what it does are two very different questions." Bailey said.

"How so? Isn't its function necessarily related to its design?" Jackie Gates seemed a little confused. "The very fact that it has certain capabilities tells us a lot about what it is supposed to do. I don't bother designing a system with emotional analogs if all it is going to do is monitor robots in a factory. Wouldn't make any sense."

"You're assuming that it was designed," said Gish. "What if it is, or once was, alive?"

Jon held up his hand to stop the protest that he could see Gates was about to make. "Let's assume that it is a technological artifact, and not an 'entity'. At least until the biologists have a chance to look at it and come to some kind of a conclusion on that question."

"Well, Gish makes a good point. It could still have been alive, just manufactured. A living machine," said Gates. "Our tholin gel technology is more alive than not."

"Granted. But regardless of the base tech, what does the thing do? Any ideas?"

"Probe. Perhaps it is just a research probe, sent here to gather information on our system." Klee said this, hands folded in front of him in contemplation. He paused just a moment, continued, "Either it got no further than Titan while doing a systematic sweep, or something drew it there."

"Maybe the same thing that brought us to Titan." Said Bailey.

"Gel?" suggested Gates.

Bailey nodded. "Could be. We've found the stuff to be very useful, and we've only known about it for a few years. Perhaps it was prospecting, cataloging the significant resources of this system."

"Why stop there? Perhaps the thing isn't just a probe, but some sort of mining

machine?” said Gates.

Jon looked skeptical. “But mining implies a much larger operation. Look at what we have there: dozens of miners, tens of thousands of microbots, and an entire support system.”

“It could just be the difference in either approach or capability,” said Bailey. “Perhaps this one artifact was able to do all the mining which needed to be done. Perhaps the makers of the artifact are a species which lives and works alone most of the time, and that is reflected in the manner of operation of their machines.”

Jon considered this. “Or maybe it is just the equivalent of a lost microbot. Our prospectors lose them all the time.”

“You mean this thing was just accidentally left behind?” said Gates.

“Perhaps intentionally left behind. Maybe it was broken, and too much trouble to mess with. Better to just leave it.”

“And we just got lucky and stumbled across it” said Jon.

“Perhaps it wasn’t an accident after all,” said Klee.

Jon looked at him. “What do you mean?”

The older man tugged at his short, white goatee. “Perhaps it was designed to make contact with us, but stationed on Titan so that we’d have to progress that far technologically before it could happen.”

“Then why hasn’t it tried to contact us before? We’ve been there a number of years.”

“Perhaps it was damaged.” Klee considered. “Perhaps it was only intended to let us know that it exists, and that is the only message it has for us. Just let us know that we’re not alone.”

“You mean that it’s some kind of herald? Announcing the presence of others in the universe?” asked Gates.

Klee said, “Why not? Something simple, nonthreatening. A message in a bottle.”

“There are much easier ways to send a message,” said Gish. “We looked for decades, on every wavelength of the radio spectrum we could think of. SETI, and all the searches that followed, found nothing.”

Jon looked at the little man. “Then why are you such a believer? What evidence convinced you?”

“I’m not sure I can explain it. I never really could before, as you know.” Gish dragged a hand through his somewhat ratty hair. “Back before the turn of the century, physicists had created a new state of matter called a Bose-Einstein Condensate. I started working with it as a hypersensitive detector, and it became the key component for our modern space sensors. It’s used in the Advanced Survey Array.

“Early on, my work with BEC had shadows in the data I couldn’t explain. Just blank spots, no background noise or anything. The sensors worked, but there were just these dead areas. It didn’t interfere with the functioning of the sensors as far as I could tell. But I couldn’t explain it. No one could. And still can’t.”

“Your message in a bottle?” asked Jon.

“No. There isn’t any kind of content being communicated. There’s no transmission

signal or anything there. It's just null content. Dead."

"So?" asked Bailey.

Gish sighed, clearly a little exasperated. "It's too quiet. There should be noise there, something. Instead, there's nothing."

"But that isn't proof of extraterrestrial intelligence," said Gates. "I see your problem."

Gish didn't look at her, but at his feet. "Now, however, we have proof. And maybe there's a connection."

Navarr had been watching the others, but not saying anything. Now he spoke up. "Maybe it's a probe of a different sort than the one Johan has suggested. Maybe more of a sentry."

"Sentry?" said Klee. "Like a guard? Of what?"

"Something on Titan, presumably," said Navarr.

Gates thought about it. "Could be the gel."

Bailey shook his head. "But only if the artifact is nonfunctional, since we've been mining and removing gel for a half-dozen years."

"The fact that it somehow manages to hover in one place suggests that it's at least partly functional," said Jon. "But who knows to what extent its other functions, if any, have been degraded over time. We'll have to wait and see what careful examination suggests. Other thoughts?"

Bailey said, "Maybe there's something else hidden on Titan that it is guarding. Perhaps a mining complex, other equipment. Something which we haven't found yet."

Ng lifted the brim of his slouch hat up a ways. Jon hadn't even been sure the man was awake, but the artist leaned forward and slowly asked, "Why does it have to do anything? Maybe it is just a monument. A bit of sculpture left behind. Think aesthetics. That will tell you much about the culture."

Bailey seemed intrigued. "Aesthetics, hmm. I usually think of function reflecting culture."

Ng licked his lips. With a visible effort, he continued to speak. "We've separated art from functionality. Not all cultures have."

Bailey thought for a moment. "He's right. Think back to the scientific instruments of the Enlightenment. They weren't just practical, they were small works of art in their own right, with beautiful craftsmanship. A lot of effort went into making them."

Gates almost scowled. "That doesn't make any sense. It wouldn't have allowed itself to be buried under meters of tholin. And the reports say that the artifact is even difficult to see. What sort of aesthetic is invisibility? No, I think that is more of an indication of an effort to hide it. Some sort of stealth or cloaking technology."

Ng had sat back on the bench, his hat pulled back down. But slowly he spoke again. "Maybe our eyes are too weak to see its dance, our ears too deaf to hear its song."

There was a pause in the conversation. Jon looked around the room. "Other thoughts?"

Gates said, "I find it interesting that it is positioned right above a large burl of gel."

“Back to the mining idea?” asked Bailey.

“Maybe. Or maybe the thing somehow attracts gel formation.”

Gish looked at her. “What are you thinking?”

“Well, we still haven’t come up with an adequate model to explain the existence of gel.” Gates paused, about to go on, but was interrupted by Bailey.

“I thought that the accepted theory was that it was formed early in the moon’s history by cometary impacts into the tholin precipitate.”

“Yeah, that’s what most people think. And there has even been some success demonstrating pre-gel formation in the laboratory by creating those sorts of conditions. But no one has been able to actually synthesize gel. That’s why we go all the way out to Titan to mine the stuff.”

Gish asked, “And you think that the artifact has something to do with the creation of gel?”

“Maybe. Or maybe it just attracts it. We know that gel does tend to migrate, not stay clumped up together. In fact, that’s the limiting factor in how we can use it for computing power: more than a couple thousand cubic centimeters, and it wants to break into smaller pieces.”

“Interesting that the amount you just cited is about the size of the human brain,” said Klee.

“Yeah, I’d noticed that coincidence before, too.” Gates paused a moment, searching through her pc database. “But the reports estimate that the burl of gel below the artifact is several times that threshold. That’s significant.”

“So there’s something going on to either create, attract, or retain such a burl,” said Jon.

Bailey said, “The mining scenario explains attracting and retaining gel. Consolidate the stuff, then collect it for use.”

“I’m intrigued by the creation idea,” said Gish.

Gates nodded. “So am I. Perhaps the artifact is some sort of small factory, turning the tholin into gel. Or the gel might be some sort of waste product of whatever process they were using while mining or harvesting something else.”

Bailey shook his head. “Meaning that the culture which made the artifact has a use for gel. But where are they? It’s bad enough for us to get back and forth to Titan. There’s no evidence of any advanced civilization capable of such a thing in our system, and the prospect of staging a mining operation over interstellar distances is pretty far-fetched.”

Gish smiled. “Agreed. But what if the artifact isn’t here to create the gel for mining and transport? What if it is here to create the gel as a necessary precondition for settlement by its makers?”

Jon felt a cold chill. “You’re talking terraforming?”

“Well, they’re certainly not trying to create a Terran environment, but perhaps one suitable for their own survival. Call it ‘xenofarming’.”

They had left it at that for the time being. Jon wanted to give everyone a day or two to think about the possibilities they had discussed, alone or in small groups. The implications of the artifact were manifold, and it wouldn't pay to try and tackle all of them at once.

He spent the rest of the day pretty much alone in his cabin, taking care of some routine correspondence, catching up on his reading. It got to be late, and he realized that he hadn't taken a break for dinner. He went down to the galley.

There he found Gish and Chu Ling. The girl was sitting at a table, the holo projector operating before her. She looked up at him and said quietly in English, "Hello."

"Well, hello!" Jon glanced at Gish, who was sitting back, watching the girl.

The miniature Seth figure above the holo said to Ling, "That was good. Now, move your tongue up against the back of your teeth to make a complete 'l' sound."

This was also in English. The girl thought for a moment, then practiced the sound a few times. Jon selected a meal from the menu, popped it into the warmer and waited for it. He looked to Gish again, but said, "I see that you have been making progress with learning English, Ling."

Shyly, she looked down at the table, but snuck a peek at him. She looked at the Seth figure and asked something in a low voice Jon couldn't make out. The tutor whispered something back. Ling nodded, looked up at Jon and then smiled. "I try!"

Jon chuckled. Gish joined him, then said to the girl in Mandarin, "You've been learning all evening. Don't you want to play a game or something?"

Her smile broadened, and she reached out and touched the control panel of the projector. Seth disappeared, and in his place was a Chinese-style castle.

Jon got his meal, sat at a nearby table. Gesturing toward the game, he asked Gish, "What's this one?"

"I'm not really sure, to be honest. Something that Klee cooked up for her. But she enjoys it, going through the different rooms of the castle, evidently searching for something. She uses different items that she finds along the way to overcome obstacles." He ran a hand through his hair. "I would've thought it was too much like her real life before I came along, but she gets something out of it."

"Well, she seems to be doing pretty well. Everything OK so far?"

"Yeah, I think so. She hasn't gotten bored with the learning programs or games we have in the projector yet. So long as that holds out, we'll be fine."

Jon nodded. "How about you?"

Gish furrowed his brow, thinking about it. "All right, I think. I'm a little disturbed by something that I thought of after our meeting this morning."

"The whole notion that Titan may be being prepared as a new home for a technologically advanced race we know nothing about disturbs me, too."

Gish smiled. "No, not that. They aren't coming, or they'd be here already."

"What do you mean?"

"Well, the reports indicate that the artifact was buried fairly deep when that man Sidwell found it. Deep enough that it would've taken millennia for the tholin to precipitate

around it.”

“That’s right. We won’t know exactly how long until Bradsen’s team arrives and can create a profile of the area, figure precipitation rates, surface currents and eddies, that sort of thing.”

Gish nodded. “Another possibility is that it inserted itself into the tholin fairly recently, evidence of that having been covered up by subsequent precipitation or surface activity.”

“That makes sense. The stuff is like a lightweight snow. It piles up and moves around pretty easily. We’ll have to wear ‘snowshoes’ to get around easily.”

“But in any event, as Arthur Bailey said this morning ‘where are they?’ Where are the aliens? That’s what’s bothering me.”

Jon thought about it. “Perhaps the artifact hasn’t yet finished its task? Perhaps they wouldn’t come unless the xenofarming was finished?”

“Perhaps.” Gish looked at Jon, troubled. “I need to think this through.”

“We can discuss it tomorrow, with everyone, if you’d like. Or the next day.”

“Let me see how this goes. I’ll let you know.”

He became aware of the dream while he was in it, part of his mind recognizing that he was dreaming. But he couldn’t seem to control the dream. He could only watch, follow the thread where it went.

He is in an old church. An ancient church, small and empty. Stone columns support a vaulted ceiling, high above. There are tall, narrow windows of clear but rippled glass to either side. And though the windows are clear, the landscape outside is indistinct, impossible to see. Sunlight pours in from the left, cutting across the pews, casting sharp shadows on the marble floors polished by generations of feet.

He is sitting on a hardwood pew, two-thirds of the way back in the space, and he is alone.

There is no sign of religious affiliation, no altar or cross visible. But there in the front, where an altar should be, sits a closed box on a slightly raised platform. And behind and high above that closed box is a stained glass window. It is filled with the image of a blue rose, glowing in the sunlight behind it.

He sits, and after a moment, he thinks that he hears someone whispering, though no one is to be seen.

The whispering stops.

He sits.

The sound returns, this time more than a whisper. He is sure that it is the sound of someone saying something, but he cannot make out the words. The voice is familiar, one he can almost recognize. It goes on, and on, but he cannot understand it.

Then it stops.

Waiting, listening, watching, he sits there. He feels an itch on his left forearm and absently scratches at it. The itch gets worse. Holding the arm up in a beam of sunlight, he

looks closely at it. There he finds a number of very small ants. They are crawling about his arm, looking for something, desperately trying to find something. He peers at them, and suddenly they all stop, and look back up at him.

He woke to the sound of Raffaello's voice "Mr. Thompson? Mr. Thompson? I'm sorry, but you have a message we've just downloaded. I thought you would want to see it immediately."

He was bleary, disoriented. Jon did not wake up easily from a sound sleep. "Message? Who from?"

"Your wife, Judith. It's marked private and urgent."

"OK, give it to me." Jon touched the back of his hand, saw the file header appear in his vision. He sat up, turned on a light, took a drink from the water flask beside his bed. When his head cleared and he felt fully awake, he initiated the message.

Judith's face appeared before him. She had been sleeping, her hair still tousled, eyes slightly red. "Jon. Let me know you're OK. I just had the oddest dream, with you in it. You were sitting in some kind of old church. I kept trying to talk with you, to get your attention, to warn you because the church was on fire but you didn't seem to notice. Call me right back, let me know you're safe."

Jon thought for a moment. It was early in the morning of their third day out. The lag time in communications with home was over a half hour. She must've had her dream at the same time he had been having his.

He manipulated the back of his hand, started the recorder. "I'm fine, Judith, just fine. But the damndest thing is that I was having a dream very similar to yours. But in mine there wasn't any kind of fire, the church was perfectly calm and peaceful. I'm going back to sleep, and I suggest that you do likewise, and maybe in the morning when we're both completely awake, this will make some sense. Now, don't worry, I'm fine. I love you, go back to sleep."

He sent the message, turned off the lights, and laid back down to sleep. But sleep didn't come instantly, and while he waited for it, he thought over the dream. There was no sense of danger, nothing that caused him any feeling of alarm. He thought that now he could recognize the voice he had heard as Judith's.

But the lasting image, the one which held him until he drifted back into slumber, was of the ants, looking up at him, almost like they had found what it was they were looking for.

Jon woke, climbed out of bed, and went through his morning routine. The events of the night were still fresh in his mind, and the dream seemed even more clear to him now than it had been when he first woke to Judith's urgent message.

No surprise, there was a new message waiting for him from Judith. She was fully awake, with none of the puffiness to her face or eyes she had when she sent the message the

previous night. It felt good to see her. “Morning love. Sorry to have disturbed you last night, but after that dream, I was really scared. I was relieved to get your message.

“I can’t really make much sense out of it, except to say that it seems to me this morning to be some kind of warning, almost like a premonition. Now, I know that you don’t go in for that kind of stuff, and I haven’t ever had this sort of experience before myself. As we discussed before you left, I’m not usually this kind of dreamer.”

She paused, her eyes narrowed the way they do when she looked at him, concerned. “I wish I knew more about this trip of yours. Take care, and please keep in regular communication with us. The rest of the family sends their love.”

Jon decided to think about the message, and to consider the dream for a while before sending a reply. He dressed, and went downstairs to breakfast. It was still quite early, and the only person there was Duc Ng. Jon was surprised to see the artist there.

He was even more surprised when Ng looked up from a hearty breakfast and said “Good morning!”

“Well, you seem to be doing well . . . I mean . . . ”

Ng smiled. “I know what you mean. Don’t worry, I’m used to it.”

Jon nodded, selected a light breakfast of rolls and fruit. Pouring himself a cup of coffee, he looked over at Ng and offered, “More?”

“Sure, thanks.”

After pouring the coffee, he sat across from Ng, and started to eat. “So, is this usually how long it takes you to cycle through a hangover?”

Ng finished a forkful of eggs, sipped at his coffee. “Depends. I actually hadn’t pushed myself as far as I sometimes do. It’s worse when I maintain the burn for a prolonged period.”

“So, you figure four or five days for recovery? I’m not prying into your life, just need to know for pacing our examination of the artifact.”

Ng nodded slightly, dark eyes tight on Jon. “Yeah, most of the time. Faster if I use some of the more powerful restoratives, but those can be a little tricky.”

“Well, let’s not push it, eh? I wanted you on this trip for your possible insights, but no reason to take unnecessary risks.” Jon peeled an orange, sectioned it. “So, what do you think?”

Ng sat back up straight. “Well, as I tried to express through the fog I was still in yesterday, I think that there is a very real chance that we may be missing some important clues about the artifact if we limit ourselves to just scientific, technical explanations.”

“Oh, I think we got that.”

“I’m not so sure. Why do you have an artist on this team?”

Jon thought about that. “It was a recommended protocol in some of the old NASA guidelines. Artists have a broader perceptual framework, aren’t necessarily limited by ‘logical possibilities’.”

“And what does that mean to you?” Ng leaned across the table. “That I’m just another kind of sensor you can use? Think about it. Those folks at NASA may have had something else in mind.”

Jon paused with his breakfast. “Go on.”

“How about if intuition and creative insight are the guiding principles of the culture that created the artifact? Not just a technological culture with its unique aesthetic sense, but a culture of intuitives who eventually produced sufficient technology to create this thing. A culture just the obverse of our own: largely artistic, with a secondary interest in technology.”

“With only a secondary interest in technology, how could they ever become a space-faring race?”

Ng shrugged. “Who knows how long they had been at it? Their culture may be tens of thousands of years old. Even a very modest rate of technological development could have led them into space eventually.” He paused, sighed. “Look, my point is that we can’t get stuck just looking for a technological explanation. The very reason that artifact was created, sent here or left here, may have had nothing to do with anything scientific or what we would consider logical. It may have had as much as anything to do with the passions, the dreams of the creators.”

Dreams. Jon looked at his left forearm and saw the hair standing up. Ng followed his gaze and saw it too. Jon finished his orange, said, “Thanks. You may have just earned your pay for this entire expedition. I’ll let you know in a couple of days.”

Ng watched him as he left the galley, curious.

Jon went back to his cabin, started the recorder. “Judith, thanks for the message earlier. As I said last night, I don’t think that you need to be worried, but I would appreciate it if you would let me know if you have any other significant dreams. I can’t explain why we seemed to have this weird coincidence, but I have a couple of ideas that I am going to explore.

“I’ll let you know what I come up with, if anything. And if I have any more odd dreams that have you in them, I’ll tell you. Fair’s fair.” He smiled. “In the meantime, know that I love you, miss you all and the comfort of our home there. I’ll send along a general message to everyone this evening.”

He reviewed the recording, then sent it up to Raffaello for transmission. Next, he recorded a message for the Seth dup. “I know you have a lot to handle right now, but I would appreciate it if you could compile some information for your counterpart to digest and sift through once he is operational again in a few days. Surf the nets and earmark any reports, postings, or public discussions of unusual dream activity. I know this sounds pretty weird, and you probably won’t be able to make a lot of sense out of it. But just gather the data for analysis later. Thanks.”

As Jon finished uploading that message, one came in for him from Magurshak. He played it through twice, then touched the phone wafer under his left ear, and said “Gish, Klee. I need to meet with you immediately. It’s about Chu Ling. I’ve just received the medical report, and we need to talk.”