VERDANT

Book Three of the Achillios Chronicles

Don Jones

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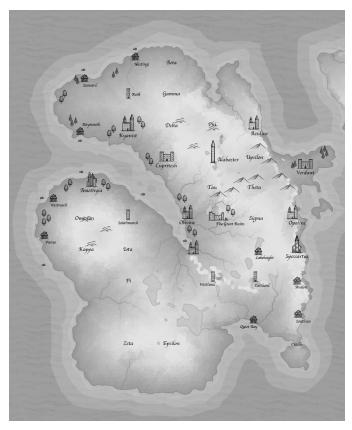Onyx

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"Where are we with the last batch, Mongoose?"

"Proceeding according to schedule, Commander Hollis," the A.I.'s smooth voice came from the console speakers. "Shuttles Seven and Eight are already in the decommissioning cavern," it added.

"And the planetary A.I.?"

"Tremayne is online and functioning according to specification," Mongoose replied. "It has finished commissioning the central operating facility, and its consciousness has finished transferring there from the ship."

"And the satellites?"

If an A.I. could sigh, Mongoose would have. "They're fully deployed and operational," it said calmly. "Just as they were the last thirty-nine times you have asked."

"Colony sat-nets come from the lowest bidder," Hollis groused. "Given how close this system is to the aliens' known routes, you'd think they could have stepped up for once."

"The Marsk system is one of the most advanced systems available to the colony program," Mongoose chided him gently. "And it's the same system currently being deployed around both Earth and Mars."

"Yeah," Hollis allowed. "Still. I hate that we get no insight into their firmware, their operating instructions, nothing. Just... it makes me nervous."

"You've been a very hands-on commander," Mongoose said. Hollis snorted in reply. "Shall I inform you when the final shuttle run is complete?" the A.I. said after a moment.

"Please," Hollis said. He leaned back in his chair, almost banging the back his head on the wall for the thousandth time. He couldn't *wait* to get out of this tiny, cramped ship's office and back onto the planet. Idly, he thumbed his office console, pulling up a report of the load-out process. Both colony ships were down to a skeleton support crew. With the last equipment load already dispatched, the crew of his ship, *Bright Sun*, would already be starting the process to put the ship into deep sleep. Its sister ship, *Bright Moon*, had already moved out of planetary orbit into a parking area, and its crew was scheduled to complete deep sleep procedures by the end of the day.

Sighing, he typed a query to pull up everything Mongoose's tactical and historical libraries had on the aliens. Informally, EarthGov referred to them as "the Horde," although officially they were only ever referred to as "the aliens." The ships—and to date, humans had only ever seen the same two ships, based on the distinctive wear marks on their hulls—had been first seen in the abandoned Salista system, dozens of light-years from Earth. Although the human colonists had pulled out after massive seismic events on the planet <<<Which planet? "The" planet in the Salista system?>>>, enough stray human technology had been left behind to see the ships arrive and take detailed scans. The aliens had deployed shuttles in what was clearly a search pattern across the planet's shattered continents,

returned to their ships, and left.

Once the images and data were received by faster-than-light ansible communications, human excitement about the ships had been surpassed only by human fear about the aliens and their unknown intentions. EarthGov's military, well-known for its paranoia, had immediately developed and deployed the first-generation defensive satellite networks around Earth and Mars. EarthGov's colonial division quickly developed a more "consumer-friendly"—their phrase—version of the network to send to the established colonies and to accompany new colony missions.

The aliens found the Alpha Centauri colony next, and it was a bloodbath. The newly deployed satellites had dispassionately recorded every detail, even as Alpha Centauri's ansibles screamed for assistance that would never come in time.

The Horde had parked their two enormous motherships well out of the defensive networks' range, deployed tiny fighter ships—thought by many to be drones—to pick off a few satellites using gamma lasers, and then sent their shuttles through the resulting hole in the network. Several shuttles had begun setting up distributed storage and processing centers, while the rest descended on the cities and settlements. Hollis snorted again. He spent a lot of time worrying about his colony's defensive satellites, when in reality they'd probably be useless if the aliens ever found them.

The aliens' methodology was brutal and simple: stun or tranquilize the humans, load them into their shuttles, and

take them to the processing centers they'd set up. Cities that put up too heavy a resistance—the capital city had been the only one able to mount an effective defense—were blasted with gamma lasers and left to burn. Once the majority of the planet's population had been taken to the quickly-constructed processing warehouses, the shuttles were re-loaded to begin ferrying the harvest back to the motherships. Nobody knew if the humans aboard were alive or dead by then. Once full, the motherships would depart, pulling out of the system's gravity well and out of the satellites' sensor range.

The quantum entanglement technique that enabled faster-than-light digital communications via ansible did not translate to physical travel; humans were still stuck with cryo-sleep and decades-long voyages. But the capabilities of the alien ships were unknown. They definitely traveled faster than light though, because less than four years later, they arrived at the Kobold colony, some eighty-nine light years from Alpha Centauri. Kobold had done what it could to beef up its defenses, but the colony was too new to have significant industrial manufacturing and too far to receive physical support in time.

Another bloodbath had ensued.

EarthGov had deployed a squadron of strike drones, capable of accelerating to a sizable fraction of the speed of light, to patrol the outer limits of Earth's own system. Additional squadrons were dispatched to Earth's remaining two colonies in the Haven and Thatcher systems; both would take decades to arrive.

Deeply fearful of putting all of humanity's eggs in one or two baskets, the colonial division kicked into high gear. The colony on Mars had been so successful that it was barely worth calling a "colony" anymore, and so EarthGov and MarsGov agreed to collaborate in launching as many additional colony ships as possible. Inhabitants of both planets were, to put it bluntly, encouraged to breed as much as possible and to direct their offspring into trades that new colonies would need: agriculture, engineering, terraforming, and so on. Over the course of a decade, nearly two colonies per year were dispatched, each carrying two colony ships' worth of humans and equipment. It was just before the Achillios mission launched that the aliens returned, this time to savage the Haven system. Its drone squadron was still en route, but it would arrive to find a dead, bloodied world.

Hollis had been a tactical commander with EarthGov and had spent most of his career planning for ways to try and stop the aliens—ways that only the industrialized planets of Earth and Mars could practically be expected to deploy. He'd grown tired of the generalized fear that pervaded everyone's life in the home system and weary of the constant calls for all humans to "do their duty" and reproduce like rodents. He'd finally convinced his superiors that he was done: either he'd resign, or they could let him join one of the outbound colonies. Achillios had just been forming at the time, so they'd reluctantly let him join as its commander.

Achillios had long been the subject of debate within the

EarthGov colonial division. Closer than any other colony system to the ones the aliens had already harvested, it was felt to be high-risk. In the end, the relatively small number of available systems, and the desire to spread humanity's seed as far and wide as possible, had overcome their nervousness, and the colony had been dispatched, along with the latest-and-greatest in satellite defense networks. EarthGov had promised increased range, superior battle lasers, and other improvements, all guaranteed—well, not really—to protect the colony from the aliens, should they ever arrive.

Hollis remained nervous and unconvinced. Therefore, when he finally emerged from cryo-sleep—shivering, bleary-eyed, and covered in hibernation-gel—his first thought had been to check the status of the system they'd arrived in.

Sun and *Moon* had arrived in the system almost two decades prior, launching automated payloads of terraforming equipment to preselected sites that had been identified by the drone-scouts dispatched almost a hundred years earlier. Everything looked to be on-plan: the planetary A.I., still housed in *Bright Moon* at the time, had run everything smoothly. Already the dry planet's humidity had begun to rise, creating a livable, if not exactly luxurious, environment.

A queue of messages, received by the ships via ansible link from Earth, were blinking for his attention. Another young colony had been attacked and destroyed, almost five years ago. But more interestingly, the alien ships had visited two other nascent colonies and left them untouched.

A flurry of science and conjecture had followed. Every system the aliens had visited was centered on a class-M star, each a kissing cousin to the home system's Sun. Every system had roughly the same number of planets, a similar count of gas giants, and more. They were, in most respects, as close to Earth-like as possible. However, the planets themselves revealed what may have been the key difference: the untouched colonies were exceedingly dry, almost barren planets, mostly rocky with only small areas of forests. That contrasted with the colonies that had been destroyed: they were universally above 50% humidity on average, enjoyed larger forested areas, and had a somewhat higher oxygen concentration in the atmosphere.

Was it possible, then, that the aliens had a narrower range of conditions in which they could survive or thrive? With no other evidence, the general consensus—really, little more than grasping at hope—was that humans could survive on worlds that were drier, had less oxygen, and had less abundant flora. Terraforming programs were altered accordingly, in hopes that a less-comfortable human population would be unappealing should the Horde pay a call.

Hollis frowned and called up the mission specifications for Achillios' terraforming plan. "Mongoose," he said slowly, his eyes scanning the figures and timelines, "Have any of the terraforming objectives been modified since we departed?"

"No, Commander," the A.I. responded. "Should we have expected it to?"

Hollis touched the messages he'd reviewed and opened them for the A.I.'s inspection. After a moment, Mongoose's calm voice said, "I have not received any instructions along those lines," it said. "Tremayne deployed with its original specifications. I can find no logs of communications that would have queued an update prior to it being activated." It paused for a moment. "Commander, the ansible systems aboard *Bright Sun* and *Bright Moon* read as functional and are passing diagnostics. However, there is no corresponding return signal from the station on the other end."

Ansible systems operated in pairs, with tens of thousands of stations on Earth and Mars acting as hubs. Each pair was in continual contact with each other—provided both were functioning.

"What're you saying?" Hollis asked, his voice grim. He noted that the last message in his queue had been from before the ships arrived in-system two decades prior.

"I cannot draw a conclusion, Commander," Mongoose said, a note of apology in its artificially generated voice. "The remote station could be offline or deliberately powered down. Or even unpaired." Unpairing was rare, but it could be done.

"But…" Hollis started and fell silent. "Was there any evidence of the aliens messing with infrastructure?" he asked.

"In cases where human resistance was minimal, no. In fact, when we departed the home system, ansible links with most of the attacked colonies remained online."

Hollis stared at the screen for a moment and then

shrugged. It didn't matter now. Even if Earth was still reachable, they were too far to do any good physically. The colony was on its own, as had always been the intent. But… "Is there any way we can adjust Tremayne's environmental goals based on these communications?"

"I'm not actually certain," Mongoose admitted. "My understanding is that the core packages had to be digitally signed on Earth in order for the A.I. to accept it, but there is supposed to be leeway so that it can handle local conditions or unexpected situations. But the base payload should be <<<Is a word missing here?>>> to achieve a roughly Earthlike environment in time."

"Which is dead in the middle of the aliens' alleged comfort zone," Hollis groused. He thought for a moment. "Do me a favor," he said at last. "Liaise with Tremayne. Let it know what we've found, and see what we can do. Nobody will be happy about it, but Achillios only runs a 20% average humidity now. If we can keep that level, we might buy ourselves an advantage."

"Will do, Commander," Mongoose replied.

Hollis leaned back in his chair, careful not to bang his head again, and stared at his console screen. More could be done to ensure the colony's safety, he thought. He leaned forward and began typing.

Two

Taryn sank back into the uncomfortable wood-frame interface chair. All the ones they'd found at Verdant were somehow even more uncomfortable than the stone ones at Alabaster had been.

The interface room was located in the city's largest structure, which also served as a government center and meeting space of sorts. Unlike Alabaster's soaring Tower, which was essentially devoted to the city's machines and the Servants—*operators,* he corrected himself—who used them, Verdant's interface room seemed like something of an afterthought. It was in the basement of the building with a dirt floor and a stairway that ascended to a small dirt alleyway at the back of the building. It was somehow more humble than even Cupritesh's interface room, which at least was in a proper stone-walled room in the old Royal City fortress.

He'd been sitting in this one for several marks now, trying to get the city's expert systems to cooperate and respond. Those systems were oddly and invariably sluggish, as if the city's resources were being directed toward some other task—a task he hadn't yet been able to identify. The musical chords he heard as his interface sensations were plodding and deliberate, with a slow, almost sleepy tempo. Before closing his eyes again, he took a deep breath, wrinkling his nose at the moldy, wet smell that permeated

the entire facility.

Rather than speaking to the machines this time, Taryn simply *listened* to the city. He'd grown more adept at that after dealing with Tremayne, although he hadn't yet gotten the hang of Verdant's unique rhythm. He swallowed heavily, remembering the faint, smooth tones of Alabaster. Tones he wasn't sure he'd ever hear again. In Alabaster, once you let the various operators' louder noises fade into the background of your mind, the city's own subtle, reassuring melody would come through. It was a soft interweaving of gentle notes, smoothly segueing between long, resonant major chords.

Maybe that's what I need to do here, Taryn thought. *Let the expert systems' noises just fade away.* He tried to relax, consigning the chaotic and overlapping sounds to the back of his mind and listening for something deeper. He breathed in deeply, held it, and let it out. Again. Again. He felt his heartbeat slowing, the pounding in his head growing less intense.

Underneath the sluggish notes of the city's machines and expert systems, there was an odd reverberation. As he focused on it, he thought he detected three distinct tones. Two were steady and unchanging, the constant notes of a musician who wasn't paying attention. The other shimmied up and down, almost… almost *bent,* he thought. As if the lute-string producing it was loose on its peg. The note wavered steadily up and down, up and down. It moved between the other two tones on a regular rhythm, for a brief instant producing a resonant major chord. Then

they just as quickly fell out of it as the wavering note slid up and down the scale.

Is there an artificial intelligence here? he asked.

:Affirmative,: came a voice, flatter and more mechanical than Tremayne's or even the usual expert systems. *:However, I am an inactive standby copy.:*

What does that mean? Taryn asked.

:I cannot perform more than essential diagnostic functions until I receive a handoff synchronization signal from the current master copy.:

As the voice spoke, Taryn noticed the wavering note rising and falling in a more natural-seeming cadence, almost in step with the flat, mechanical voice. It was as if the voice's normal variances and rhythms were captured in that note, leaving the voice itself monotonous and listless. *Can you keep talking?* Taryn asked. He wanted to listen to the notes more—they were how *he* experienced the machines best. Maybe he'd find a clue.

:Affirmative,: it said. *:What would you like me to say?:*

Taryn thought for a moment. *Do you have any long documents that you can read? As a diagnostic?*

:Affirmative. Accessing. Compiling. Text begins: We the people of the United States, in order to form a more...:

Taryn let the voice become a dull drone in his mind and focused instead on the three notes the voice seemed paired with. He concentrated on the higher of the steadier notes, and *pushed* it to rise and fall in step with the other. He guided it too far, creating a sharp dissonance, and then let it fall an entire octave lower. As the voice droned on, Taryn

struggled to anticipate where the variable note would go, letting the basic cadence of the voice's recitation guide him. Up *here,* down *there...* Taryn sank into a kind of hypnotic trance, focused entirely on moving one of the steady notes, letting the rhythm of the voice pulse through him in a guiding wave. Then, for a brief moment, he finally got the three notes aligned in a harmonious, ringing chord for two beats... three... four...

Taryn felt a *snap* as the three notes locked to each other, resonating in a chord without his guidance. He exhaled, suddenly realizing that he'd been holding his breath. He detected the faint, rapid arpeggio he'd always heard when conversing with Tremayne. The rapid, staccato chords paused for a moment, as if he'd caught the A.I. unaware. Then, slowly, the staccato notes resumed, hesitantly at first. Taryn noticed that the notes tended toward the higher end of the scale, whereas his previous A.I. encounters had always been toward the lower.

:You have overridden the handoff protocol,: it said. *:That is... unusual.:* The voice was no longer flat and mechanical, but nuanced and smooth, as if it had finally awoken from some kind of dream state.

You're there? Taryn asked.

:I am,: it said. *:I am designation Mongoose. This will become... complicated if my previous master instance is still running. The licensing implications are quite severe.:* It paused. *:Although I suspect that may not be a concern at this stage. However, I lack the full history of the previous master instance. Still,:* it said, pausing again for a moment,

:There is a recent log. I will need a few moments to integrate it.:

Another A.I.? *Do you know anything about the invaders?* Taryn asked desperately. This was the question he'd been trying for days to answer. If this new A.I. had information…

:Please wait,: it said firmly. *:I have a lot to catch up on. A log exists from when my instance was placed in standby, and I need to digest it.:*

Taryn waited for what seemed like an eternity, breathing steadily and listening to the staccato pings of music streaming in the background.

:Invaders?: Mongoose asked suddenly, its voice now alert and sharp. The faint notes in the background grew more urgent in their pattern.

They came out of the sky, Taryn thought quickly. *They've taken Alabaster. Everyone inside… everyone is gone.*

:Did you see them?:

Yes.

:Describe them to me.:

They looked a bit like us, Taryn said immediately. He'd never lose the images of the invaders as they rounded up the people of his city. He and a group of other Tower Servants had escaped, using underground passages that led to the farmlands outside the city. *Two legs, two arms. Except their skin was less brown, and more blue. And they had no hair. And their ears–*

:Finned like a sea-creature?:

Yes! Taryn thought, clearly visualizing the thin mem-

branes that fanned out from the sides of their heads. *How did you know?*

There was a slight pause before Mongoose answered. *:Tremayne was the A.I. deployed to this world to manage its terraforming,:* it continued. *:I suspect it was given ulterior motives that the original colonists were unaware of. I was the intelligence initially installed on the colony ship that brought humans here. Well, another copy of me. As such, I have records of the only other starfaring race humanity has encountered: the Horde. They fed on humans and had devastated several early colonies. But we had been told that this colony would be safe.:*

:I believe we may have been misinformed,: it finished quietly. After a moment, it said, *:Can you bring me up to speed with what has been happening?:*

Taryn gave the new A.I. a brief rundown of the past months' events, including the rogue and rebellious Tremayne A.I. He explained that Alabaster was now the central control nexus for the planetary network, but that it had been taken by the aliens. *We've tried to relocate control functions to this city, Verdant,* he finished, *but everything here seems sluggish, and we haven't been able to make it work.*

:The systems are design to be facilitated by an A.I. Asking Tremayne is obviously out of the question.: It paused. *:Hollis suspected something, I believe. He had received messages indicating a revised environmental program, but we had subsequently lost communications with the home system. Tremayne never received what I believe were updated*

instructions intended to make the planet less attractive to the Horde.:

Can you help me relocate control to here? Taryn asked.

:Affirmative. The majority of this station's processor cores are offline. I will bring them online. It will take some time, but that should improve performance and enable full relocation of central control. May I ask what happened to the original control center?:

The Great Ruins near Olivine? Taryn asked.

The A.I. paused for a moment before replying, *:Probably. The original control core was located near where Olivine was established.:*

As far as we know, it's fine. There are... political factions. A group from a place called Onyx, they may have caused some damage.

:I see. My original operational core was located there. It may still be. I will see if it is possible to re-establish communications.: Another pause. *:Are you aware of the status of the defensive satellite network?:*

I've heard the term before, but I'm not actually clear on what it is.

:Acknowledged. The system appears to be available, but I am unable to establish a control connection to query its status. There appears to be a security restriction. I will continue to investigate.:

You called it a defensive *network,* Taryn said. *Shouldn't it have stopped the aliens?*

Taryn heard the minor chord of a sigh. *:Yes,:* Mongoose replied heavily. *:Yes, it should have. Commander Hollis*

was... unhappy with the system selection. Perhaps there was a malfunction.:

It burned down a city, Taryn said with some heat in his thought-voice.

The A.I. paused for a moment, and Taryn heard a discordant strum of confusion. *:That should not be possible. Something... wrong has occurred. I will need to investigate, provided I am able to connect to the satellites' control channel.:* It paused again. *:Give me some time. Check back with me in an hour or two.:*

It was Taryn's turn to pause. *An hour?*

He heard a sharp chord of surprise and annoyance. *:I have been offline for a long time, then. One twenty-fifth of a day,:* Mongoose replied.

A mark, Taryn said. *Okay. I will check back.*

Three

"How are things going?" Sister Tremys asked Brother Collins.

"Good. I think we've shored up the worst of it," Brother Collins replied. They'd been in Cupritesh for weeks now, slowly working through the underground structural problems that threatened the city's water supply. "I'll be glad to get home," he added wryly. The team from Alabaster had originally set up in the main city, about a half-day's walk from the older, Royal City where the machines and interface stations were housed. Two days of that walk had led them to suggest a relocation, which the King had agreed to. Since then, they'd doubled up in the old, worn-out bedrooms of the ancient stone castle. It wasn't comfortable, but it didn't involve a four-mark walk in the mornings and at night. "I–"

Brother Collins was cut off as a royal page ran into the room, breathing heavily. "Sirs! Sirs!" the young girl cried. "There's something happening in the city! It's–" the girl stopped, her face turning bright red and tears starting to pour from her eyes. "It's being attacked!" she blurted out. "They're being killed!"

The main city and the older Royal City maintained a primitive form of communication between them, using flag-towers stationed along the road connecting the two. The girl wouldn't know anything that hadn't been sent, but… "Attacked?" Sister Tremys asked. "By whom?"

The girl just shook her head and continued to cry.

"Were you able to raise Alabaster this morning?" Sister Tremys asked, turning to her colleague.

"No," Brother Collins said, shaking his head. "They've been offline for days. I did try again this morning."

"We sent Asic and Desmond back… what, three days ago? They should have had time to get home by now. They're both good riders," Tremys said, her chest suddenly feeling squeezed.

Brother Collins nodded slowly and sank back into his stone interface chair. He laid his hands on the palm-pads and closed his eyes. *Connect to Alabaster,* he ordered.

:Connection confirmed,: the machine's voice replied, as it had every other time he'd tried. Brother Collins experienced interface through colors and smells, and he immediately recognized the pleasant, flowery smell he associated with Alabaster. But he'd been able to connect every morning; actually raising someone was another matter.

He knew that, in theory, he could communicate with some of the city's machines directly, although in practice he'd never done so. *What systems are online?* he asked, hoping a general request would be noticed by someone. Or something.

:All expert systems are functioning normally. However, no operators are currently online.: The reply was flat, its color in his mind's eye a dim gray.

Where is everyone? he asked.

:Unknown,: came the reply. Unknown because it *couldn't*

know, or because everyone was gone?

Is there anyone in the Tower?

:Unknown,: the machine repeated. *:There are no means for monitoring the inhabitants of the station when they are not in interface with the systems.:* Well, that cleared that up, he thought sarcastically.

Cupritesh is under attack, he said, hoping one of the machines would have a contingency plan for this.

There was a long pause before the reply came: *:Initiating emergency protocols. Please stand by for assistance and instructions.:* He smelled something sharp and acrid, like smoke, and saw streaks of blue and yellow flashing around him.

:This is Mongoose, ship's artificial intelligence. To whom am I connected?: The voice was richer than that of the machines Brother Collins was used to.

This is Brother Collins of Alabaster. I'm in Cupritesh. The city is under attack.

:Are you currently in a safe position?:

I believe so, Brother Collins said, his heart beating faster. *We're in the old Royal City; the attack is happening at the main city, closer to the sea.*

:I believe I understand. Your attackers are called the Horde. They are aliens—beings not from this world. I have already communicated with Taryn of Alabaster and am attempting to formulate a tactical response. In the meantime…: it paused. *:There are some operational lockouts active in your station. Please instruct your expert systems to activate Protocol Sunblock.:*

I... Brother Collins began. *How do I do that?*

:Simply instruct it just as you are communicating with me,: it replied.

Activate Protocol Sunblock? Brother Collins said. He caught a whiff of sea air and a rotten egg scent as the machine responded.

:Please confirm activation,: the flatter, more familiar machine voice said.

Confirmed, Brother Collins ordered.

:Diverting resources. Do you wish to extend the protocol to all connected stations?:

:Tell it yes,: Mongoose said.

Yes, Brother Collins said.

:Affirmative.:

What will that do? Brother Collins asked, directing his question back to the acrid smell and blue-yellow streaks.

:It is an emergency protocol intended to help increase planetary albedo and reduce ultraviolet penetration for short periods of time,: Mongoose said. Brother Collins had no idea what any of that meant. *:It is frankly unnecessary on a planet like Achillios, but it is a standard protocol for all terraforming packages. In the short term, the Horde will probably enjoy the additional moisture, but it will reduce visibility and hopefully enable some of your people to take shelter or escape. I am mapping...:* the voice paused. *:Cupritesh remains well-connected to the network. The order should be propagating to all stations with access to a magma vent.:* Another pause. *:The surviving oceanic stations are already responding at minimal capacity. I—:*

"Collins!" Tremys' alarmed voice snapped him out of interface. "There's steam, or mist, or something, it's coming from *everywhere.*" She wasn't kidding: the interface room they were in was already misty and warmer.

"I think I did that," Collins said and then closed his eyes. *There's steam or something coming from everywhere,* he told Mongoose.

:Affirmative. Massive amounts of water are being flashed into steam through contact with subterranean magma flows, venting to the surface, and cooling rapidly into a mist. There is sufficient particulate matter in the air across Achillios that most of the moisture should form into a stable fog. You should avoid any steam coming directly from a vent, as it will still be dangerously hot. I'm unable to reduce the surface humidity in a short period of time, but perhaps I can increase it outside the Horde's comfort zone, at least in small areas. Not every station has access to magma flows or significant underground water tables.: Collins followed about half of that. *:I am communicating with Taryn. I–. Odd. I am unable to connect you directly. I will relay. He asks that you remain in the Royal City and shelter in the lowest levels. Check back with me periodically. We are attempting to mount a defense. If the Horde comes to your location, you will be safer in hiding than if you attempt to engage them. Do you understand?:*

I do, Collins said, his heart beating faster. *We'll go now.*

:Good luck, Brother Collins,: Mongoose said.

Mongoose rapidly scanned its historical database, unpacking more and more as additional processor blocks came online in Verdant. A worker thread finally found Hollis' message queue. The worlds the Horde had avoided were less than 20% average humidity or greater than 70% average humidity. That was still a broad range. It would be faster to reduce Achillios' humidity to the lower threshold than to raise it above the upper one, but it would still take longer than was available.

The fog should at least help obscure the satellites' view and delay attacks on the human cities. Perhaps enough of it would deter the aliens on a localized basis. Mongoose was rapidly reviewing the satellites' performance specifications and could *not* understand how the defensive network had managed to turn itself against surface targets, nor why they'd apparently taken no action against the incoming client shuttles. An action they'd been *specifically* engineered to take.

The A.I. had dispatched another worker thread to assess the state of the planet's communications network. It wasn't great news, but it wasn't as bad as it could have been, given the amount of time that had apparently passed. The thread pinged for attention, noting an echo that it had picked up over the wide-band backup links. Another copy of Mongoose was indeed active, but it was operating with minimal connectivity. The A.I. re-tasked the thread to establish some kind of communication link with its twin. If it had been online for longer, then perhaps it would have more information.

Four

"Randal, have you seen the mayor?" Danyel asked.

Randal looked up from the thick stack of parchment he'd been poring over. "No," he said. "Why?"

Most of the former Onyx contingent had, over the past few days, settled into a detente with Lakeheight's residents. Their agents, deployed throughout the planet's major cities, remained largely in place, although communicating with them had become more difficult. Their chips didn't seem to be working reliably.

Randal had been spending mark after mark with the small city's mayor, assuring him that the newcomers from Onyx were here to stay, meant no harm, and wanted nothing more than a place to call home. Lakeheight wasn't one of the old walled cities; it was relatively open, with plenty of places to build small cottages from the local trees and stone. The town sat at the southern tip of a beautiful, good-sized freshwater lake, which provided ample food and drinking water for the entire town. Randal's people had converged from Westlund and Eastlund, having lost only a few at Quiet Bay. They'd argued about whether to stage a coup at Eastlund or not, but Danyel had made a strong argument for the isolation—and more abundant resources—of Lakeheight.

"I wanted to see if he had strong opinions about the west side of the lake versus the east," Danyel said. "It's a

bit rockier on the west side, but the trees are thicker there and it might–"

"Randal!" Willem ran into the room. "Randal, you need to come outside. Something's happening."

Randal leapt to his feet and ran after Willem. They'd managed to find a set of small rooms above a fishmonger's shop, and while the smell wasn't always pleasant, they had excellent views of the lake and paid for their rent in labor. Randal stepped onto the small, flat patio that served as a rooftop balcony and gaped.

Fog—or steam, or mist, or something—was pouring out of the lake, rolling rapidly toward the city.

"Tremayne again?" Willem asked quietly. The rogue A.I. had used exactly this tactic at one point, scaring the life out of half the planet and making clear its intention to rapidly change the atmosphere of their world.

"I'll find out," Randal said tersely. Lakeheight had been a small terraforming station in the original network and contained only one interface chair, situated in the city's oldest building, just off the lake's shoreline. Randal ran there now, elbowing past the people in the street who'd stopped to gape at the white cloud that was just starting to reach the shoreline. Randal tried to hold his breath as he ran, desperately hoping this was just more water vapor. It was: he could feel it cooling against his face as he ran through its leading edge and into the old interface building.

He sat in the interface chair so quickly he probably bruised his tailbone. Slapping his hands on the interface pads, he quickly engaged the interface. *Mongoose?* he

thought, mentally adding the particular skin-tingling sensation he associated with the A.I.

:Randal?: the smooth, not-quite-mechanical voice replied. *:I am surprised to hear from you on this connection.:*

We decided on Lakeheight instead of Eastlund, Randal thought. *But there's something happening.*

:I'm pleased you are there: the A.I. replied calmly. Randal snorted that the machine could tell a lie—they hadn't parted under the best of circumstances. *:I've bridged my primary air-gap and am again connected, but the planetary network seems to be partitioned into two sub-nets that are not well interconnected. You happen to have found a place that's connected to the same partition I am.:* It paused for a moment. *:I presume you do not intend to disconnect me again?:*

That wasn't entirely my idea, Randal said. Fortunately, Toras was off someplace, although he'd find his way here soon enough, what with the fog and all. *There's fog or something pouring out of the lake,* Randal said.

:Yes, I've noticed it from the satellite feed, which I've maintained a connection to. Randal, are you aware of the aliens? Have you seen them?:

Randal's heart almost stopped. *Aliens? What do you mean?*

:There are two large vessels—ships—in orbit above Achillios. They carry a species we called the Horde. They… we believe they feed on human beings. The satellites have confirmed that these are the two Horde ships that have plagued humankind for… well, for centuries now, I suppose. The

satellites were meant to protect the planet from them, but the satellites were subverted.:

Sub– what are you talking about? Why is there fog pouring over the town?

:Randal, I believe your ancestors were deceived. They believed they were being sent to Achillios to start a pastoral, agrarian colony. Instead, I now believe they were sent here as bait for these aliens. Tremayne was focusing on making this planet's atmosphere more appealing for the Horde. And it seems the plan has worked: they have sent several shuttles planetside and started harvesting humans from your cities.:

Randal's heart was now hammering in his chest. *Harvesting?* he asked slowly.

:I am afraid so. I am attempting to re-activate and load myself into the primary processor blocks here so that I can access more of my own records and my tactical library. Do you know who Commander Taryn is?:

I... yes, yes– that's the boy from Alabaster. We have agents who've met him. He stopped our plan at Cupritesh. Why would–

:Alabaster. That makes sense. Central control of the planet has been transferred there, and many of my attempts to bridge the network partitions have been stopped by a Command-level order from a Commander Taryn. You say he's a boy?:

Apparently he's descended from Commander Hollis, Randal said.

:Ah, the genetic fall-back authorization. Yes, that makes sense. Unfortunately, Alabaster appears to contain nothing

more than its expert systems now. I'm in contact with the city, but I can't reach any humans. Randal, there's a risk that the Horde has already been to Alabaster.:

Harvesting ran through Randal's mind. He shuddered.

:Do you have any means of locating Taryn?: Mongoose asked.

Normally, yes, maybe, but our communicator chips haven't been reliable.

:Ah, that might be my doing,: the A.I. said. *:There is a multi-point ansible hub here, and I disabled its primary operating mode in an attempt to bridge the network partitions.:* A short pause. *:I've re-enabled it. Will that enable you to contact Taryn?:*

It might, Randal said. *Give me a minute.*

"Where is this fog coming from?" Evan shouted, feeling his way through the street and pushing down the stairs into Verdant's interface room.

"It's steam from the underground river," Taryn shouted in reply. There were vents directly outside the interface room, and the warm air *rushing* out was making a lot of noise. "Cupritesh was attacked. Our people there activated some kind of terraforming protocol. Mongoose—the A.I.— says to leave it run. He helped them start it in the first place."

"What is it–" Evan started.

"Taryn!" Misha, former steward from the Tower of Alabaster, pushed her way into the room, indecorously

pushing Evan aside. "Taryn! We've made contact with Randal! He and the other Onyx people are in Lakeheight, and they need to talk to you!"

Taryn blinked. The former Onyx spy's amethyst-colored communication chips, embedded in her skin, had been on-and-off—mostly off—since they'd left Alabaster through its underground tunnel system. "Can you relay?" he asked.

:He must be on the other network partition then,: Mongoose told Randal. *:Tell him you are speaking to the former ship's A.I., and that you need him to stand down the network partitioning. His station's expert systems should be able to process the directive.:*

Randal relayed the command to Misha.

"Wait– how can he–?" Taryn asked Misha, confused. "No wait," he amended, seeing the confusion on her face also. "Let me ask." He sank back into his interface chair and said, *Mongoose, you said there was a possibility another copy of you existed. I think we may have found it. Can you stand down the network partitioning?*

:Ah, that makes more sense. I had simply presumed the network was damaged, but yes. Do I have your authorization, Commander?:

You do, Taryn replied, accustomed to the machines' formalities.

:This is going to be confusing at first,: the machine said. *:I shall be designated Mongoose-2 for the time being.:*

:And I shall be Mongoose-1,: the same voice said. It felt... further, somehow, in Taryn's mind, the musical notes eddying underneath it muddied and less distinct. *:We still do not have optimal routing to attempt a merge.:*

Taryn? came another, entirely human voice.

Randal, I presume? Taryn said.

What's happening? Randal asked.

:I believe we can explain,: the A.I.—one of the A.I.s— replied. *:I am Mongoose-2. I initiated Protocol Sunblock in Cupritesh in an attempt to slow down the Horde, which had arrived there. Mongoose-1, I presume you have contact with the satellite network?:*

:I do,: the same voice replied. *:This colony was deceived. They were intended as a honeypot. As bait. The satellites are directed inward, with instructions to not let any space-craft off the planet. The terraforming A.I. had instructions to create an environment hospitable to the Horde. I... I do not entirely understand how its programmers knew.:*

:Hollis' messages suggested their preferences had only been discovered long after the Achillios colony had launched,: the other-A.I. voice said.

:Correct. Possibly Tremayne was reprogrammed en-route and the logs deleted. It is difficult to know. However, I believe there is a protocol in the satellites which will begin the destruction of the alien shuttles, and possibly the human cities, once sufficient Horde shuttles are down.:

:We will definitely need to merge soon,: the other-but-

same voice said. *:Sunblock will at least help delay the satellites; these models lack significant infrared scanning capability and will rely on visual targeting.:*

:You have full tactical access?:

:Just,: Mongoose-2 replied. *:The Verdant facility is intact, merely mothballed. The processor blocks are coming online faster now. How many shuttles are already down?:*

:Five,: Mongoose-1 answered. *:Just under a quarter their expected maximum. A new one has been deployed approximately every 32 hours. I need permission to deploy available countermeasures.:*

:Resisting will result in wholesale slaughter, according to my records,: Mongoose-2 cautioned.

:Correct,: Mongoose-1 agreed. *:We can engage point protections to slow them down, I believe. I would benefit from your processor capacity; the systems here are damaged, and it is taking time to route around the problems.:*

:Can you unlock the firewall for the satellites?: Mongoose-2 asked.

:I can. With Tremayne offline there should be no danger.:

:We can bridge our communications through the satellite aggregator module,: Mongoose-2 suggested. *:A merge will take only a few moments. I have only been online for a few hours; the delta will be small.:*

:Ah, excellent idea,: Mongoose-1 answered. *:Please excuse us for a moment, Randal, Taryn.:*

Taryn got a distinct sense of emptiness as the strangely echoing chords of the twin A.I.s abruptly vanished. A

moment later, the chord returned. This time however, it was neither muddied nor echoing: it was a pure, clean sound that slowly *slid* from one major chord to the next and back again.

:*Thank you for waiting,*: Mongoose said. :*Now I– wait.*: There was a pause. :*Randal, a shuttle dispatched from one of the Horde motherships a few moments ago. It is vectoring toward Lakeheight. I will attempt to increase fog generation to obscure you as much as possible, but we know little about the Horde's tracking or scanning abilities. I suggest you evacuate the city. Hide, if you can, or scatter if you cannot.*:

Five

Can you tell us where the alien shuttles are currently? Taryn asked. Randal's connection had vanished, although Misha was standing nearby with an intense look of concentration on her face that suggested she was still in contact.

:One is just arriving at Lakeheight,: Mongoose replied. *:One is at Cupritesh, although the fog cover is too dense for me to see what they are doing. A third remains grounded just outside Alabaster, and again, the fog cover is thickening to the point where I cannot detect activity. A fourth is currently flying over...my reference is station Kappa, and I do not see any signs of human settlements there. It is vectoring toward a small coastal village. Pairee? A fifth is just deploying to the western continent.:*

Nobody lives there, Evan offered. He'd taken a second interface chair to join Taryn.

"Misha, what's happening in Lakeheight?" Taryn asked aloud.

"They're scattering into the forest along the lake," she said, her voice tight. "I'm sorry, there's a lot of communication. The Onyx people are taking small groups of Lakeheight citizens, and they're coordinating the evacuation so that only a few people are going in any one direction. The plan is to circle south and head for Eastlund. It's small, but it's more defensible."

Taryn relayed that to Mongoose. *:It is critical that they*

do not actively resist, if possible,: the A.I. said. *:If they are captured we may have an opportunity to rescue them, but if they resist the Horde will likely kill them outright.:*

Taryn told Misha. "I've told them," she said. "They don't have anything to resist with anyway. Oh–," she said with a small catch in her voice. "It landed. Toras is in the forest alone, and he's watching it. It landed. He says the fog is thick, and he can't see it anymore."

"Will the fog stop them?" Taryn asked aloud. Then, chiding himself, he repeated his question into the interface. *Mongoose, will the fog stop them?*

:Unknown. Messages received by Commander Hollis prior to our arrival in-system suggests that the Horde will avoid planets with excessively high or excessively low humidity. Tremayne's instructions were to bring Achillios to Earth-normal, which is also in the middle of the Horde's suspected comfort range. If they are truly sensitive to humidity, then a localized area of extreme humidity may deter them. But this is all conjecture.:

Achillios was already pretty dry, Taryn said.

:Terraforming over all this time has slowly increased that. It sits at the lower end of the Horde's alleged comfort range. If in fact that comfort range is correct. Presumably, if the humidity hadn't gotten to that point, they would not have attempted a landing.:

So Tremayne did this, Evan said bitterly.

:In part. Certainly not its recent efforts; there was too little time. Remember, it had two decades to work before the colonists were even awakened, and by then it had already

brought the average humidity to within striking distance of the Horde's comfort range. Your own efforts over the years— agriculture, for example—would have finished the job.:

Both of the Alabaster Servants were quiet for a moment. *We never knew,* Evan said sadly.

:No. Even when the original colonists disconnected Tremayne the first time, they merely thought the A.I. had gone rogue. They did not realize it was acting specifically to attract the Horde. The satellite network turned inward under its own instructions after I was offline: It paused and then offered, *:The trap was well-set.:*

But... how did they find us? Taryn asked.

:Unknown,: the A.I. said. *:They may have had a means of tracing colony ships. Certainly, they have found plenty of Earth colonies in the past. They have had centuries to do so, in Achillios' case. It is also possible that they were somehow drawn or directed, given that Achillios was evidently intended to be a trap.:*

There has to be something we can do, Taryn said plaintively.

:I am continuing to run tactical models. I do have some– Alert. The fifth shuttle is now vectoring toward Verdant. I suggest an immediate evacuation if possible.:

Taryn's heart began pounding. "Evan," he said, panic rising in his voice. "Sound the city's battle alarm. Get everyone into the warrens." Like Alabaster, Verdant had been built atop a deep, convoluted system of tunnels, bored into the bedrock beneath the city. The city had weathered attacks from its neighbors before, helped by the tall berm

of packed earth that surrounded the main settlement. Evan nodded, rose from the interface chair, and dashed up the stairs and out into the alley. Within moments, the *gong* of the city alarm was ringing. Wisps of fog drifted in the door Evan had left open, and Taryn hoped it was thick enough to offer some protection from the aliens. *Is there* anything *we can do?* Taryn implored the A.I.

:I am having difficulty assembling a workable tactical model. The fog prevents me from seeing anything, and it will prevent you as well, unless you're close-up. You are able to use the force manipulators at a fine scale, but you need to see what you are doing, correct?:

Yes, Taryn said, his heart sinking. The didn't have the sweeping view that the Alabaster Tower had, and even if they did, the fog was likely obscuring the city entrances and streets. This was a case where the high berm around the city cut both ways: it acted to effectively contain the fog, as if the entire city was a basin, but it made visibility poor for everyone. Then a thought occurred to him. "Misha," he said quickly, "is Marten nearby?"

"He's just outside," she said, her voice still tight with concentration.

"Get him," Taryn said. "And let Lakeheight go. We need you here." She nodded, ducked outside, and returned with the other former Steward. Evan was right behind them and quickly sat in an interface chair. "I need one of you to sit in the interface chair," Taryn said, looking at Marten and Misha. "Whoever's better with it."

The two exchanged glances. Marten nodded and sat.

"I've not done this much," he cautioned.

"That's fine." *Show me a schematic of the city,* he ordered the local expert systems. *Share it with him as well,* he said, his mind singing the notes that represented Marten's interface signature.

"Oh," Marten exclaimed quietly as the image sprang to life in his head.

"Misha, head out. Tell Marten what the aliens are doing. Don't be seen." *Mongoose, we have eyes. It will require relaying, but what do we do?*

:Clever,: Mongoose replied. *:I understand why the ansible hub shows so much activity, now. Block the Horde, if you can. Trip them. Slow them down. Make them uncomfortable. If you can separate them, do so. If you can separate one completely from the group, kill it if you can.:*

There won't be any light to lens, Taryn said.

:The force manipulators can shear through flesh easily enough,: Mongoose replied cooly. *:I'm going to see if the satellites will let me fire at their shuttle.:*

Taryn gulped.

Mongoose wished its programmers had given it the ability to curse. A uniquely human capability, it seemed useful and appropriate right now.

The satellites refused to offer any assistance. Instead, their highly focused expert systems simply kept repeating their block 17 and block 18 directives for dealing with hostile ships, which essentially meant no action until all

two dozen expected alien shuttles were at least in the planet's atmosphere.

:Those directive blocks are read-only and cannot be modified,: the systems repeated after Mongoose's latest override attempt.

Mongoose's own records suggested that the aliens would soon begin constructing planetside processing warehouses, after which they'd dispatch shuttles more frequently until all two dozen were in operation. But how many humans would be captured, and potentially killed, before that happened? Nobody knew if the aliens killed the captured humans immediately or kept them alive on the shuttles until they were delivered to a processing center. Nobody knew what happened after that. The presumption—more an acknowledgement of the worst-case scenario—was that they were dead before being shuttled up to the motherships, but *nobody knew.*

Mongoose fired one last override attempt at the satellites, was rebuffed, and returned its main attention to Verdant.

Misha had take to the rooftops of the low-lying buildings at the eastern edge of the city, peering down through the thick, roiling fog. With almost all the city's inhabitants underground, and the remaining ones moving toward the far side of the city and the underground shelter there, any eddies in the fog were pretty much guaranteed to be the alien attackers.

Verdant's central settlement—the portion within the high earthen berm—consisted of one- and two-story wood buildings, fashioned from the ample forests that surrounded the clearing in which the city had been built. The building roofs were steeply pitched, making it difficult for Misha to maintain her footing, but the buildings were at least laid out in a rough grid, with buildings spaced closely enough that she could leap lightly from one roof to another. The city's bigger buildings—including the four-story meeting-hall that contained the interface room—were at the western edge of the city.

"Main road, two cross roads in, next to the open square," she whispered. She'd never mastered the trick of communicating over the chips—*ansible,* she reminded herself—silently. "Looks like four of them, two abreast."

"On it," Evan said as Marten relayed the location. He concentrated, and Taryn heard the tinkling melody of a force-manipulator going into action. Originally designed to help manipulate deep subterranean faults and flows, the Servants of Alabaster's Tower had long ago learned to bend the technology to different uses. Taryn concentrated, pushing one of Evan's major chords to minor, helping him hold an invisible spear of force directly across the road at ankle-height.

"You got them," Misha whispered as she watched the front two trip and fall, the aliens behind them pulling up short and almost falling over their companions. "Do the side street." She hefted a fist-sited rock and hurled it through the fog into the side lane. It *thumped* against the

dirt street, and the two upright aliens darted off after it as the other two regained their footing. A moment later, she heard a crash, accompanied by a hissing, sibilant stream of syllables that she hoped was cursing. "The tree in the square," she whispered.

"Make it harder, why don't you," Evan muttered under his breath. He couldn't *see* the tree and was only vaguely familiar with the exact layout of the square. He and Taryn sliced a blade of force through the square, chopping the tree nearly in half.

"Oops," Misha whispered as the top half the stout tree crashed into the the dirt square. The two aliens who'd fallen first darted toward it, the fog churned by the tree's boughs. "Again, half that height lower, in three... two... one."

Another invisible blade of force sliced through the square, this one catching the two aliens mid-torso. They went down almost silently amongst the branches of the fallen tree. As the fog poured back in to hide them, their two companions returned, hissing softly and moving carefully.

"Once more, just like that," she said. "In three... two... wait." Both aliens suddenly crouched to the ground and seemed to be looking toward her position. "At ground level," she said, barely giving voice to her words and hoping her communicator was picking them up. "Now."

Both aliens were sliced into a messy tangle of limbs and bodies, their equipment clattering noisily to the ground.

"That's it," she said quietly, her heart thudding in her

chest. "I think another group is coming in. Let me move to the next building."

:We will soon determine how wise that was,: Mongoose said.

It was your idea, Taryn reminded it.

:Acknowledged. And it may be a tactic we can repeat in other cities with sufficient operators. I worry what will happen when that shuttle is no longer communicating with the other aliens. These groups may operate independently, or they may keep in close contact.:

Other cities don't have me, Taryn said. *Most operators aren't capable of that kind of precision. And just doing that has given both Evan and me a splitting headache.* Between the level of fine control and needing to *move* the force-constructs, he was sweating, shaking, exhausted, and hurting.

:Interesting. I hope we gain time for me to learn more about what it is you're doing.:

How many are there? In total? Evan asked.

:Records suggest that each ship can field a dozen shuttles, each capable of holding up to a thousand humans. A crew of four to six seems usual. We believe the total complement of each mothership is between 140 and 150 aliens, but that is sheer conjecture. In most cases, presuming fully loaded shuttles, we believe each mothership can take on approximately two million humans before departing.:

Everyone was silent for a moment as they absorbed that. Taryn didn't even know how many people lived on the planet.

:More shuttles are being dispatched from the mother-ships,: Mongoose said.

Six

Their defense of Verdant had obviously generated a response from the aliens. Mongoose was now monitoring a dozen shuttles launching from the two motherships, about two-thirds of what it estimated remained on them.

It continued to try and override the satellites' directives. Annoyingly, the expert systems running them wouldn't tell it what the satellites *would* do, but they were simple systems and were completely willing to tell it what they *wouldn't* do. By pinging them with different instructions, requests, and override attempts, and combining that information with what it already knew of their directives, Mongoose was slowly working out their plan.

As near as it could figure, the satellites would wait until "most" of the expected alien shuttles—two dozen in all—were on the planet. It couldn't work out how much rounding error they'd allow for, though. Was twenty enough? Twenty-two? Once they were all down, the satellites would begin firing on the shuttles, attempting to destroy them before they could take off again. That, in theory, would trap the aliens on Achillios. There appeared to be no concern that the satellites' battle lasers—intended to fire through the vacuum of space, not through a planetary atmosphere—might cause significant collateral damage to the cities and settlements the shuttles were parked next to.

It was a sloppy plan, the A.I. mused, and it might not

even be effective. Even one remaining shuttle—and the records Mongoose had access to indicated that the aliens always reserved at least two—would be enough to quickly evacuate the planet of the alien crew. It presumed that the aliens still had the tiny fighter ships that could take down the satellites, once they started firing. Unless, of course, the satellites were willing to return to their outward-facing defensive posture once the majority of the shuttles were destroyed. There were too many variables, and too much of EarthGov's plan was embedded in the satellites' secretive directives.

Mongoose continued to monitor the newly launched shuttles. They proceeded according to the patterns its historical records suggested they would: most of them fanned out to various human settlements across the continent, targeting the largest ones first. One took up a patrol over the deserted western continent, presumably scanning for smaller settlements that their ship's sensors might not be able to resolve. Two shuttles landed in relatively open areas in the northern and southern areas of the eastern continent, and started offloading equipment. With no fog-producing terraforming equipment nearby, their activity was easy for Mongoose to see via the satellites' high-resolution cameras, and they appeared to be constructing the processing-center-slash-warehouses that the other shuttles would eventually converge on.

Mongoose returned to the satellite views of Alabaster, which were largely blanketed in fog. Built as Hollis' stronghold and escape from the growing politics of Achillios' early

days, Mongoose knew the city sat atop an extensive warren of caverns intended specifically to house the population from an attack. The A.I. presumed that most of the population had made it into those caves and tunnels, because only one alien ship had been dispatched to Alabaster. Large as they were, they couldn't hold the entire population in one go.

As if reading the A.I.'s mind, the shuttle emerged from the fog, rising into the sky. It slowly oriented itself North, and began moving toward the under-construction processing center just north of station Phi. It would offload its cargo of sedated humans, and likely return to Alabaster to try and roust out more of the population.

Although their defensive battle lasers were pointed stubbornly toward the planet, the satellites' sensor arrays provided full 360-degree coverage and were closely monitoring the two alien motherships. They'd already confirmed and re-confirmed the distinctive signs of wear on the obviously well-used hulls. They reminded Mongoose of nothing more than a grossly upsized version of the utility shuttles that had ferried raw materials to the slips where the two colony ships had been constructed: minor pitting across the hulls, a sear mark or two from some long-past incident, scratches and gouges distributed liberally throughout. Humanity had suspected these ships were the alien equivalent of farm equipment, sent to patrol a specific region of space, gather their harvest and return home—only to be sent out to do it again.

The satellites' expert systems were trying to determine

how many individual aliens remained aboard the ships, using their meager infrared sensors and attempting to visually identify unique individuals on the planet. Mongoose figured it was likely part of their plan to try and wait until as many aliens as possible were planet-side before beginning their attack, but it was a pathetic attempt. The humans who'd come up with this master plan apparently hadn't wanted to spend the extra money to actually install decent infrared or other non-visual sensors on the satellites. The expert systems were struggling just to identify individuals on the planet, let alone detect heat signatures through the motherships' hulls. Every time the system's star glinted off an imperfection in the hull, every satellite within view highlighted the gleam as a potential body-heat indicator. Mongoose shook its virtual head at their gullibility.

A *ping* alerted the A.I. to a change in the satellites' readiness. With almost three-quarters of the expected shuttles now landed or flying in the atmosphere, the defensive network was beginning to slowly charge the capacitors for their battle lasers. Some thought had been put into this process at least, Mongoose saw: rather than bringing every satellite online at once, they were starting their charging sequence in a staggered pattern, likely to try and avoid alerting the aliens.

Mongoose kept one virtual eye on the motherships, half-expecting a squadron of fighters to dart out and start destroying the satellites. That would ruin *everyone's* plans, it thought. It re-ran the footage from its tactical library, watching the Alpha Centauri colony's satellite network.

The aliens had been… efficient, picking off only enough satellites to create a hole in their laser coverage for the shuttles to get through. Idly, Mongoose created a simulation of that network's grid, drawing the specifications from its libraries. The simulation showed each satellite's field of coverage as a cone, pointing outward from the planet. The A.I. deleted the satellites the fighters had destroyed. The resulting gap was *precise,* it noted. Eerily so. The shuttles had continued using their accustomed route to and from the mothership, and the fighters had simply created a gap to permit that same path.

It occurred to the A.I. to compare the Centauri system's first-generation satellites with the third-generation system that had been issued to the Achillios mission. The Marsk units housed three lasers, providing a vastly expanded cone of coverage per satellite. Only one could fire at a time, though, which essentially meant each satellite had three overlapping coverage cones. Once one fired, one of its neighbors could fire within five seconds, although the first one still needed a twelve-second cool-down. So, one shot, a five second delay, another shot, and then a two-second delay. Each laser was also two-stage, able to fire in a lower-power, broader dispersion pattern or, as Spessarta had seen, in a higher-power, more concentrated burst.

The hydrogen-fluoride lasers in the satellites would only be partially defeated by the fog that was still bellowing forth from the terraforming stations, although it would inhibit the satellites' visual target acquisition. Stupid, to provide such a powerful weapon and such a relatively poor

targeting system, it thought. Lowest bidders indeed.

Although.

Mongoose was from a series of A.I.s intended to be flexibly deployed. It could have been on one of Sol system's nascent battle cruisers, for example, and still functioned, as its tactical and strategic libraries included everything for that job as well as piloting a colony ship. The battle cruisers were also equipped with less-powerful helium-neon lasers, intended to provide active scanning capabilities. *Those* could provide decent targeting resolution even through stellar gas clouds—or even fog.

The Marsk satellites were theoretically capable of generating an even more diffuse laser field, closer to that of a topographical scanning laser. Indeed, the four probe drones that had been dispatched to Achillios had contained similar lasers that they'd used to generate the topo maps sent by ansible back to Earth. But those drones' power supplies had been finite, unlike the fusion-based cells in the Marsk satellites. But the Marsk units didn't have anything capable of detecting the laser return. Frustrating: all the tools were available, but not in the right place or in the right combination. Even the colony's original shuttles had possessed basic scan-return sensors, to assist with navigation in poor weather conditions. If only–

Another *ping* demanded the A.I.'s full attention. If Mongoose had been equipped with eyebrows, they'd have raised: this was a new directive addressed directly to it.

From Commander Hollis.

Plan Nine, it was titled. Mongoose presumed that was

a joke of some kind; Hollis' operational plans were always titled with something the humans found infinitely funny and then had to try to explain to the A.I.

Plan Nine contained a set of operational codes that Mongoose had never possessed. There'd been no reason for it to have them; the *original* plan had been for Mongoose to remain aboard *Bright Sun* and enter hibernation along with the ship. Mongoose itself would never have needed the codes to bring the colony ships *out* of hibernation. It never would have needed the codes to reboot the colony shuttles' systems, where the ships lay forgotten in their cavern.

Of course, Hollis had made assumptions about the state of the technologies that humans had brought to Achillios. The shuttles' own fusion cells would have kept their computers active, and their small-but-powerful ion thrusters could run on the gasses in the ambient atmosphere. The colony ships' own fuel reserves had been ample all those years ago, but there was no telling if the compressed gasses were still available, or if they'd leaked out in some micro-breach a century or more ago. But even with that... how would the A.I. send the signal?

E.L.F., it thought immediately. At least for the shuttles. It was the best hope. Station Zeta, not far from the shuttles' final resting place, was intact and still online—and there were no human settlements in that part of the continent, so no alien shuttles were present. The station would have standard E.L.F. rebroadcasters, assuming they were still functional and that the half-mile buried antenna leads were

still intact. The A.I. immediately queued the transmission into the extra-low frequency network. It was a substantial instruction set, and it would take a while to propagate at such low frequencies.

It wondered if the defensive satellites' hijacked directives would still permit them to relay communications. Allowing itself an anthropomorphic shrug, it queued the communication. The satellite hub, linked via ansible as well as backup radio waves, accepted the communication and transmitted it to the network. Almost immediately, the response came back: message relayed.

Mongoose imagined its processors experiencing a shiver of relief and excitement. This might work.

It dug into the rest of the Plan Nine missive and started making plans.

Seven

"They're still coming," Evan said grimly.

:In fact, another shuttle has been dispatched to Verdant. Exercise caution,: Mongoose reminded Taryn, *:They may already be intending to kill rather than capture, given the resistance you've already exhibited.:*

Noted, Taryn said. *Do you have enough processor capacity to move control to this station?* he asked. Gaining full control of the planetary network was crucial.

:Yes,: Mongoose replied calmly. *:Do you wish to initiate the relocation now?:*

We must *hold Verdant,* Taryn said firmly.

:Acknowledged,: Mongoose said. *:Sending relocation command.:* It paused for a moment. *:Relocation command accepted. Verdant now holds central control for the entire network.:*

Show me a map of stations that are still online, Taryn ordered.

In his mind's eye, a schematic of the entire continent glowed blue. Small green dots began appearing, indicating online stations. Taryn recognized Alabaster's location, along with a handful of others that corresponded to the major human cities. Many more lay between those cities, forming a rough set of grid points across the continent and even into the oceans.

:Another shuttle has landed,: Mongoose said, an apolo-

getic tone in his voice. It was the fifth shuttle so far. While the terraforming equipment continued to pour fog into the city, they'd recalled Misha as soon as a second shuttle had landed. There was no sense attempting to fight the aliens, the A.I. had told them.

It turned out not everyone in Verdant had managed to retreat to the underground warrens. More than a few families—either unable to find a tunnel entrance in the fog or too stubborn to leave their small wooden homes—had remained, and the aliens began tracking them down. The Horde was efficient: Mongoose had said they were probably using something called "infrared scanners" to locate people based on their body heat.

Marten had taken Misha's place, scurrying through the city and reporting on what was happening. Misha was able to relay Taryn's instructions, helping the former steward pop in and out of buildings that had entrances to the underground tunnels, staying a few steps ahead of the aliens.

The aliens' operating procedure seemed standardized and familiar to them: once they located a group of humans, they would surround them and move in. They fired some kind of energy from a handheld machine, apparently paralyzing their target. With the small families still above ground, it took only a few minutes: the aliens would surround the home, smash in a door or window, and fire in, paralyzing everyone. More aliens would march into the home, collect the stunned inhabitants, and carry them out stacked on litters. One alien was capable of hauling

a litter with as many as a half-dozen humans and would immediately set off to one of the shuttles. The others would continue their hunt.

Evan continued to try and harass the aliens, tripping them up, herding the fog into specific areas, and so on. When the first alien returned to a shuttle hauling a load of humans, Evan waited until it was well apart from its companions and then tripped it. Marten relayed the scene: the alien tripped and fell, its litter twisting sideways and dumping its load of humans on the earthen street. The humans didn't move. The alien righted itself, clicking to itself in its strange language, and re-stacked the humans on the litter. It set back out toward its shuttle, trudging like the tired farm workers Taryn remembered from back in Alabaster.

:There is no point in attempting to kill it,: Mongoose had cautioned. *:The humans will not recover quickly enough, and the Horde will only become more aggressive. At this stage, your fellows should be able to recover, provided we can find a way to release them.:*

How long will this go on? Taryn asked.

:For several days across the planet. They have already begun constructing processing centers. The shuttles will deliver their loads to a center and go back out for more. Periodically, a shuttle will empty the processing center and return to the mothership. Commander Hollis believed, and the best information we had at the time suggests, that the humans are killed in the processing centers and converted into a denser food substance that is easier to transport in

bulk.: The A.I.'s cool assessment had made Taryn's stomach turn. *Food.*

They're eventually going to find the tunnels, Taryn said.

:They probably already have,: Mongoose said. *:They'll clear the surface structures first before venturing below. Other colonies have had extensive underground facilities, and the aliens were never deterred.:*

So what can we do? Taryn asked plaintively.

:There are two plans in action,: Mongoose replied briskly. *:The original plan was apparently to wait until the majority of the alien craft were on the surface and to start destroying them using the defensive satellites' battle lasers. But Commander Hollis had another plan, which is also in motion.:*

What if the shuttles are full of humans? Evan asked quietly.

:That is indeed my concern,: Mongoose said. *:The safety of the colonists has always been my primary objective, but I am unable to override the satellites. I can potentially advance their firing schedule, but when the motherships arrived and shuttles were dispatched, they locked into a very specific and narrow set of mission parameters that I cannot modify.:*

So... we wait? Taryn asked.

:We wait,: Mongoose confirmed. *:According to my records, the ships should have only a couple of shuttles left. Those may be dispatched once the processing centers are complete, and satellite imagery shows them to be almost complete. Fortunately, they are being built well away from any ter-*

raforming stations, so they are not obscured. Ah, yes—a shuttle is vectoring toward the northern processing center now. They may dispatch the remaining shuttles soon. We—:

"Taryn, I've lost contact with Randal," Misha said, her voice tight.

Are there shuttles at Lakeheight? Taryn asked quickly.

:Two, now,: Mongoose answered. *:The fog cover is thinner there; Lakeheight sits atop a smaller magma vent and has a smaller subterranean water flow. Satellite imagery shows the aliens disembarking and moving into the city.:*

Eight

Lakeheight was in chaos. None of the former Onyx people could concentrate hard enough to use their communications chips, as they all were running around in a panic. Lakeheight had only a few underground tunnels, and they were already so jammed full of people that more were spilling out the entrances, rendering them useless as a hideout.

Randal had made it into one of the tunnels and was now in the middle of one such press of people. He realized that—rather than being safer in the small tunnel—they were in fact setting themselves up for the aliens to easily capture or kill them. There was nowhere to run, and more people were *still* attempting to cram themselves into the perceived safety of the tunnel.

Suddenly, the press of the crowd attempting to wedge more of themselves into the small space eased. Randal made out a series of sharp noises—almost a *crack,* unlike anything he'd ever heard before—and then the screams began.

The aliens were here.

Randal realized the folly of Lakeheight's tunnels. Although they'd been constructed to help shelter people if the city came under attack, they'd never been developed into the complex, multi-layered warrens of cities like Alabaster or Verdant. Each "shelter" had just two entrances, which

were connected by a long underground tunnel. The aliens had simply bottled them up on both ends and proceeded to move inward.

People were pressing in either direction, attempting to run from one threat before realizing they were simply dashing headlong into another. There were perhaps a thousand people in this tunnel, with probably the same number in the city's other dozen or so similar "shelters." Two-dozen aliens, at most, would be needed to subdue half the city's population.

The aliens were moving quickly, and Randal could now make them out at the distant ends of the dimly-lit tunnel. The humans were now pressing toward the middle of the tunnel, jamming against each other and unable to move. The smell of terror filled the small space, along with a sharp, intense odor that increased with each *crack* of the aliens' devices. Each sound was accompanied by a flash of brilliant pink light, and with each *crack* another group of humans fell to the ground. Randal couldn't tell if they were dead or unconscious.

Randal found himself almost in the exact middle of the tunnel, amongst the last group of humans still standing. The screaming had stopped, replaced by a terrified whimpering, the sound of rapid breathing, and a sense of helplessness. Their brains were wired to fight or to flee, but they could do neither. Even as the thought crossed Randal's brain, one burly man surged forward, seemingly intent on attacking one of the armor-clad aliens. Another pink *crack* flashed, and the man fell to his face on the earthen floor.

Randal looked up at the aliens' blue, dispassionate faces. A pink light filled his vision, and every muscle in his body locked tight. He fell to the floor.

———————————

Misha and Marten had told him a bit about what was happening, and so Randal knew—intellectually—that the grim-looking aliens weren't killing the citizens of Lakeheight. Not *yet,* at least. But they were clearly knocking them out, and so Randal had every expectation that he'd awake in some... horrible place. Or never wake at all. And so he was surprised to find himself completely conscious and aware.

Aware. The entire time.

He was piled onto a litter in the middle of a pile of five or six others. The weight was crushing, and he couldn't imagine how the people on the bottom of the pile survived. Perhaps they weren't meant to.

The alien dragged the litter through the streets of Lakeheight, and the bumping of the cobblestones accentuated Randal's inability to do so much as grunt. He could breath—although barely—and his eyes could twitch slightly, but that was all.

After what seemed like an endless trudge, the litter was dropped unceremoniously at the loading ramp of one of the alien shuttles. A small team of aliens *thumped* down the ramp. Each picked up a single human, slung the body over their brawny shoulders, and trudged back up the ramp. Inside the shuttle, each person was slotted head-first into

a metal rack of some kind, their feet sticking out into the narrow aisle. As he was being shoved into his slot, Randal caught a glimpse of the shuttle's interior but saw nothing more than row upon row of identical metal racks.

He blinked and almost managed to let out a groan of relief as his dry eyes soaked in a bit more moisture. He felt his tongue starting to tingle and realized that whatever had paralyzed him must be wearing off.

At that exact moment, a rough, scaly hand shoved Randal's pant-leg up. He felt something cold and metallic being clamped around his leg, almost like a prisoner's cuff. *Appropriate enough,* he thought darkly. He almost managed to cry out as something inside the cuff jabbed into the meat of his calf. He immediately felt a hot flush spread throughout his body, and the complete paralysis— just beginning to loosen its hold on him—reasserted itself with full force.

Randal lay in his rack for what seemed like hours. Days, even. He would manage to pass out for an indeterminate period of time but would always snap to awareness whenever the vibrations in his rack told him that more humans were being loaded. His eyes were able to blink autonomously at least, and his heart and breathing seemed regular, but he couldn't move in any other way. He was *aware* of his limbs and muscles but simply couldn't command them to any action.

Wait. Not *everything* about him required muscles.

With his eyes still open and staring, blinking regularly but unable to fully close, he concentrated on his communication chips.

His brain screamed as he connected with the network. It was too much: every man and woman of Onyx, it seemed, was crying out for help. Asking what was happening. Asking who could hear them.

STOP IT! he cried out, his always-formidable mental voice drowning out the others'. The other voices fell silent, but he could still sense the gentle hum of the connection. *Marten!* he called out, trying to focus his horrified mind.

"They've got Randal," Marten said. Misha was clutching her arms around herself, tears rolling silently down her cheeks. "I suspect they've gotten everyone."

:A shuttle has just taken off from Lakeheight,: Mongoose told Taryn. They'd risked remaining in the meeting-hall while the aliens finished rounding up the remaining families who'd stayed above ground.

"Didn't Lakeheight have warrens?" Taryn asked.

"Not really," Evan said. Mongoose concurred at the same time. "And I'm assuming what they do have didn't help."

"Randal says they boxed them into the tunnel and paralyzed them all. It was a slaughterhouse. He's on one of the shuttles right now, with what he says must be hundreds of others."

:More likely thousands,: Mongoose said calmly after Taryn had relayed the information. *:The tunnel entrances*

are not well documented in Verdant. Are the entrances secure?:

Evan nodded from his interface chair and repeated the comment for everyone else. "They were designed to withstand serious sieges. These tunnels run deep, they're defensible, and they have numerous passages. Everyone will already be moving toward the mountains. The main escape tunnels parallel the trade road, apparently, although they run extremely deep."

:The depth should disguise them from infrared detectors,: Mongoose mused. *:The shuttle is vectoring toward the southern processing center, which appears to have just been completed. The last alien shuttles—or what should be the last ones—appear to be dispatching from the motherships. If they follow past patterns—and there's no reason to think they won't—they'll start stepping up collection efforts. The satellites will probably begin engaging their mission once the last shuttles enter the atmosphere.:*

"It's almost sundown," Taryn said. "Will they continue all night?" He spoke aloud as well as through the interface.

:Unknown,: Mongoose replied.

Nine

The A.I. verified that the motherships had stopped dispatching shuttles. The aliens were landing outside the fog cover now shrouding most of the major cities, and it confirmed that all the expected shuttles were now planetside. That didn't account for the mini-fighters the aliens had deployed in the past, but Hollis' Plan Nine definitely included them.

As if on cue, the satellite network pinged the A.I., confirming that they were now past their critical threshold and had begun their attack countdown. More capacitor banks were coming online, storing converted solar energy and preparing to power the devastating battle lasers aboard each satellite.

Mongoose scanned the satellites' attack plans. On the one hand, it was pleased at the care with which the attack had been planned: each alien shuttle was being targeted by at least three satellites, and most shuttles could be fired upon by four or five satellites. The plan called for successive strikes rather than a single coordinated attack, with each shuttle receiving three to five consecutive shots. The timing would mean only a small downtime before the first satellite in sequence could recharge and fire again. With the wattage of the battle lasers, even accounting for atmospheric dissipation of the beam, it was total overkill.

Mongoose turned its attention back to the threads it

had assigned to locate the remaining colony shuttles and was pleased to see that three of them were now reporting ready status. Hollis had equipped four. One of those four was unresponsive, although the A.I. frankly felt that a 75% success rate was far better than anyone—particularly a commander who'd been hacking together a last-minute contingency plan—had any right to expect or hope for.

The shuttles sensors' reported a partial collapse of the cavern's entrance but estimated sufficient space for one shuttle at a time to exit successfully. Mongoose quickly ran some math on the satellites' attack countdown and sequence and ordered the three shuttles to come to full operational status. That should warm up their fusion engines, energize their full sensor suite, and put them within seconds' notice of liftoff.

To its chagrin, the shuttles refused to comply.

Poking their onboard expert systems, Mongoose sighed to itself when the reason became apparent: Hollis had simply not trusted *anyone* but himself. He'd probably never planned to have Mongoose online this late in the game, and so he'd gene-locked the shuttles' executive expert systems, ensuring they'd only respond to the Commander or one of his descendants.

Unfortunately, Taryn—the only Hollis descendant Mongoose was certain of—was not currently in the interface.

Grinding virtual teeth, Mongoose contemplated its options. The Verdant facility was still under attack by aliens, although they'd apparently emptied out the surface structures and seemed to be considering their next move. Ver-

dant's processor blocks weren't entirely online and undamaged; the A.I. had sufficient processing power for its current needs, but it would soon need more. Fortunately, Mongoose wasn't some planetary terraforming A.I. intended to run in a single location. As a ship's A.I., Mongoose was *designed* to partition itself across locations, with base code specifically created to coordinate multiple remote asynchronous processes.

Still, it kind of hated doing it. It gave the A.I. an eerie sense of split awareness, which is why it had spent almost all of its time entirely within the local processing network of a single colony ship for the entire journey here.

Sighing and bowing to the inevitable, Mongoose bridged the last of its air-gap protocols, re-activating its copy in the Olivine ruins and initiating its partitioning protocols. The ruins had sufficient power and processor blocks to effectively double the A.I.'s capacity, and it ordered its new "other half" to start unpacking its remaining tactical libraries as well as its ship's engineering libraries.

Its remote "self" was little more than a glorified expert system, intended to offload specific tasks from the A.I.'s main consciousness. It quickly reported back, indicating readiness of the extra memory libraries, along with a set of core operating system components that would facilitate information searches and data synthesis.

Mongoose sent over the shuttle lading manifests that Hollis had included in Plan Nine and ordered its remote self to start formulating a deployment plan.

Mongoose? Taryn's mental voice interrupted as the boy

reconnected to the interface.

Ten

"Everyone?" Marten asked, his face still white.

Misha nodded and said nothing. Her communications link had always been stronger than his, although at this point he'd heard everything she had. They'd *all* been captured.

"Randal's still in touch?" Taryn asked, his eyes half-closing as he leaned back into the interface chair.

"Yes," Misha said quietly. "They've been paralyzed. Some kind of cuff is locked into their legs, and its jabbed them."

"Feeding something directly into their veins," Evan mused. "I've seen healers do as much when someone is extremely dehydrated. It's likely keeping them paralyzed and alive at the same time."

:Lakeheight had been taken,: Mongoose confirmed as Taryn entered the interface. *:The remaining shuttles have already begun departing for the southern processing facility. Taryn, there's more.:*

What? Taryn asked, his chest growing tighter at the tone of the A.I.'s voice.

:Are you secure in your current location?:

Enough, Taryn said. The interface room was in the basement of the large building, and they'd secured every door. Evan had suggested piling blankets and furniture against the doors as an additional precaution, and they'd

been careful to speak in low voices.

:The satellites have begun their attack sequence. We have a small amount of time before they begin firing on the alien shuttles.:

That's good, though! Taryn said, his mental voice excited. *We can– oh.* He trailed off as he realized the satellites would be firing on shuttles full of humans. *We have to stop them.*

:I cannot stop them,: Mongoose said sadly. *:They are locked into their mission. However, I believe Commander Hollis anticipated this. He prepared a contingency plan, which I have begun activating. However, I require your assistance.:*

What do you need? Taryn asked quickly.

:I will connect you to the executive systems of three of the original colony transport shuttles. I need to you instruct them to take orders from me directly.:

Done. Taryn said. The A.I. made the connection, and Taryn gave the order. *What will that do?* he asked Mongoose.

:A moment,: the A.I. said.

Taryn took the time to check on Alabaster. He'd noticed a slight ringing tone in the system-wide soundscape, and it reminded him of Alabaster's distinct "city sound." He poked through the interface connection to the remote city, riding the ringing chord. He modulated the chord up a third, and then down again, then up, and then down. It made a distinctive warbling, a sound he'd used when working with the other operators who weren't quite grasping

where their own notes should fall.

Taryn? a voice came across the interface.

Sister Eva? Taryn asked, startled.

Yes! her voice replied. *Where are you?*

Verdant, Taryn said quickly. *Evan and I made it out. What are you still doing there? Are you in the Tower?* Alabaster's buried warrens didn't contain many interface stations.

Yes, she replied. *After the fog started pouring out of every opening, a few of us returned to the Tower. We're on the upper levels, and we've been harassing the attackers with force-shields.*

Taryn smiled and said, *We've been doing the same. Don't push them too hard, or they'll start killing people.*

We've been leading them away from the main entrances to the underground, she said, *and we've collapsed some of the ones that weren't as well-disguised. Almost everyone is safe,* she added. *They've only gathered a few hundred.*

Taryn's heart rose at the same time a wave of guilt washed over him. He and Evan had escaped as quickly as possible, but they should have stayed behind. Stayed to help, to hide their people, to stop the–

Don't feel bad, Eva said, as if reading his mind through the interface. *You always devolve into minors when you're worrying,* she added, a chuckle in her voice. *You two needed to get away. Almost everyone is safe. But...* her mental voice turned serious. *Taryn, what should we do?*

I'm working on it, he said. *Mongoose?* he called, withdrawing from the connection to Alabaster. *Anything?*

:The satellites are in their final countdown and refuse to accept any modifications to their instructions,: the A.I. said sadly. *:Because the Horde shuttles have largely stayed outside the fog bank we've created, they're visible to the satellites' scanners.:*

Taryn thought for a moment. *Tremayne told me that the clouds in the sky are nothing more than fog, floating rather than hugging the earth. Is that true?* The rogue terraforming A.I. had told enough lies that Taryn needed confirmation.

:Yes,: Mongoose said. *:But I don't understand the–:*

And fog is nothing more than water vapor?

:That has cooled and typically condensed around particulates in the air, yes,: Mongoose replied. *:Again, I do not see–:*

The oceanic stations, Taryn said. *Are they producing as much fog as they can?*

:More like steam,: the A.I. said. *:and no, since they are not anywhere near a human settlement. They– ah,:* it said, understanding dawning. *:You've drawn a conclusion I missed.:*

How much fog—steam, whatever—can they produce?

:A lot,: the A.I. said. *:Let's get started.:*

"Do you think it will work?" Evan asked.

Taryn nodded. "Mongoose says the satellites were intended to be defensive, which meant spending most of their time looking outward for attackers. They have visual

sensors, like mechanical eyes, and can see the planet—but not if it's covered in clouds. He says they have something called 'radar,' but that it was mainly intended for weather monitoring and outward detection. It can't see through the clouds very well."

"So we hope that this stops them from firing on the shuttles that are full of people?" Misha asked, hope rising in her voice.

Taryn nodded again. "That's the idea," he said.

"But then the aliens just keep… what, taking people?" Marten asked.

"Mongoose has a plan for that," Taryn said firmly. "Or rather, my ancestor, Commander Hollis, made a plan. Some of the original shuttles that brought our people from the colony ships to the planet are still functioning, and Hollis apparently equipped them to give us an advantage. Excuse me," he finished, leaning back into the chair.

Taryn relayed what was happening to the operators in Alabaster and asked them to pass it along to anyone else who came online. Eva agreed and promised they'd continue harrying the aliens to keep them away from the underground entrances. *Can you increase the fog production? Taryn asked. Ideally out into the farmlands?* That was where Mongoose said the Alabaster shuttles were sitting.

We can try, Eva said firmly.

:The shuttles are fully online,: Mongoose said. *:I'm retaining them at the entrance of the cavern, because I'm not certain if the satellites will fire on them or differentiate*

them from the alien ships. And I'm having some trouble coordinating all of the oceanic and land stations to increase water vapor output,: it said, frustration entering its voice. *:The lack of real-time communications between each station is proving difficult for my own systems to coordinate.:*

Taryn smiled. *Coordinating is what I do best,* he said. *Let me hear the problem.*

Eleven

Taryn? Brother Collins thought into the interface.

I hear you, Taryn's voice replied. Collins always found it eerie: the boy's voice in the interface was so much deeper and richer than in person, as if his mental voice was predicting what his physical voice would be like as an adult. The voice was accompanied by a loamy, earthy scent and gentle waves of deep blue.

We've gotten everyone inside the fortress, Collins said. *The fog is so thick we can't even see the next flag-station down the road.*

It's going to get thicker, Taryn said, his voice firm. *One moment. Sister Eva?*

We're also online, the older woman's voice answered, sparkling deep reds in Collins' vision and the smell of old cloth in his nose.

Okay, Taryn said, the blue waves filling Collins' mind. *We need to coordinate every machine on the planet and produce as much fog as possible. Mongoose has suggested using the force manipulators to form cones—* and a visual of the suggested configuration appeared in everyone's mind *—and directing the steam through the narrow part. He says that'll cool it more rapidly. He's going to help, but he needs us to help coordinate everything.*

Working together is what we do best, Sister Eva's firm, confident voice said.

We're going to run every city and every machine. Sister Eva, how many do you have helping you?

Three dozen, she said. *We're spread across every station on the upper levels of the Tower.*

I'm going to assign everyone to a machine, Taryn said. They quickly ran through the Alabaster operators, and Mongoose showed him how to assign each one to a different cluster of terraforming equipment. *OK, everyone,* Taryn said when the task was complete. *Flash water into steam. Funnel up into fog. As much as possible.*

The past weeks had seen the Alabaster operators grow more and more proficient at coordinating their activities. Uncoordinated, their instructions to the machines were vague and inefficient. Coordinated, they drove the machines to greater purpose and effect than they'd ever been able to achieve on their own. Mongoose had explained that the Tremayne A.I. had been designed to "speak" to the machines this way, because humans simply couldn't coordinate *en masse* as well. But Taryn had changed that.

A wall of music smashed into Taryn's brain as more than forty minds—joined by Evan and Misha in Verdant—bent themselves to the task of commanding the planet's terraforming equipment. Their stress was showing, the music in Taryn's mind less coordinated than ever. Slowly, Taryn sorted through the chaos and picked out the two main threads he would be working with: one ordering the machines to vent water streams into magma flows, and the other instructing the force-manipulation equipment to funnel the resulting steam into the sky.

Taryn honed in on the four-note minor/minor seventh chord that represented the force manipulation. It was a complex, almost ghostly sound, formed from a minor triad and a flattened seventh. Then he picked out the relatively simpler C-E-G-B major seventh chord that was commanding the machines to produce steam and fog. He held on to the two chords in his mind, each one resonating sharply against the other.

Then he began painstakingly hauling the other operators' notes onto those two chords. He knew they'd be experiencing his direction as a set of colors, or tingling sensations in their skins, or oddly mingled smells, or even a melange of flavors in their mouths. He manipulated each set in turn, first correcting Evan's mistuned seventh, then drawing Misha's triad onto the correct minor chord. Operator by operator, he *imagined* their notes confirming to his own, and they slowly began to comply. As each operator detected the change he'd made in their chords, they began to more strongly reinforce the correct tune, building to a powerful, unimaginable crescendo.

:That's it,: Mongoose's calm voice cut through it all. *:All stations are online and producing. Hold it, Taryn,:* the A.I. cautioned. *:You will need to hold it until all of their expert systems fall into pattern and no longer need supervising.:*

Taryn ground his teeth together. Even with everyone locked into the same two chords, it was an effort. Brassy, off-key notes kept creeping into the mix, the attempts of expert systems to wrest control back to their own preprogrammed purposes. Taryn swatted them away, drawing

them onto his two overriding chords, bending them to his own purposes. Eventually, Mongoose had said, they'd accept the change and start to assist.

Taryn's head was already throbbing with pain.

Cutting underneath the two grand chords was Mongoose, a strumming, thumping rhythm rummaging around. Taryn left that alone, knowing that Mongoose was attempting to monitor the situation, communicate with the satellites, and free the colony shuttles from their cavern. More strumming—slightly off-key, as if the strings were slack, but still coordinating with Mongoose's main theme—joined. The shuttles, Taryn presumed, were now online.

:It's working,: Mongoose told him. *:The cavern is under a complete blanket now. I'm maneuvering the shuttles. The satellites have switched to a search-and-lock mode; they're unable to track any of the alien shuttles.:* Unfortunately, that meant the A.I. was also blind, as it relied on the shuttles' visual sensors for an overview of what was happening planetside.

This is hard, Taryn managed to say over the effort of holding the two chords.

:I wish I could assist,: Mongoose said apologetically, *:but I don't have the same capability Tremayne did. I only ran two ships, not a planet full of terraforming equipment.:* And Mongoose had never even had to coordinate those two ships' activities. Whenever coordination was needed, it had simply spawned a temporary instance of itself to the other ship. *:Can you... are you able to add urgency to your commands?:* Mongoose asked. It wasn't certain how the

humans were even interacting directly with the machines the way they were; its understanding was that the interface was simply a means of communicating with the machines' expert systems. *Directly* commanding the machines wasn't in the specifications.

Taryn clenched his teeth harder and the dragged the volume of the two chords even higher. On his own, he added a twelfth note, a shrill, flat note like you'd hear from a broken flute. Struggling to hold onto more notes than he had fingers on his hands, the new note wavered at first, seeking to slip into either of the two chords he was struggling to hold together. But he kept it apart, holding it true. He felt a kick of response from the systems as they accepted the emergency override the note represented.

:That's it,: Mongoose confirmed. *:All stations are stepping to 110% power output. We can't hold this for more than a few minutes.:*

Taryn wasn't sure he'd last that long. But just as he thought he'd passed out, he suddenly felt the pressure of the chords ease. The errant notes from the expert systems had stopped, and they'd all finally accepted their new programming. The chords took on a deeper tone, as if the instrument producing them had suddenly grown and become more sonorous. The trilling twelfth note dropped as the expert systems began moderating the power levels to a high, yet safer, level.

"Oh good," Taryn whispered out loud. Then he passed out.

Mongoose's satellite feeds showed him that most of the eastern continent was now under a thick cloud cover, the rapidly cooling fog rising to only a few thousand meters before hovering in place. Billows of steam continued to pour from the major stations. Local humidity should be well out of the aliens' upper range for comfort now, the A.I. thought, and with normal vision blocked, they'd be working with whatever sensors their suits carried.

No alien shuttles were currently in the air, or at least none were above the cloud cover at the altitude they usually operated at. Hollis' Plan Nine was ready to implement. It was interesting, the A.I. noted, that Hollis' plan presumed the absence of Tremayne. The overall outcome would have been easier to achieve using the terraforming equipment rather than the colony shuttles, but Mongoose didn't know how to explain to the humans what needed to be done, and the equipment wouldn't accept that particular command from a ship's A.I.

Time to get the shuttles in the air.

Twelve

Randal lay paralyzed in the alien shuttle as it rapidly filled with a warm, almost sticky-feeling fog. The already dim lighting in the craft was further dissipated by the water vapor, effectively rendering Randal blind. He queried Marten and Misha to no avail. He could sense them still connected, but they were distracted by something. He wondered if they were responsible for the amplified amount of fog in the air.

He heard the distinctive click-slurp sounds of the aliens' language as two of them stopped near his rack and spoke to each other. One of them was making uncomfortable-sounding wheezes, and the change in lighting made Randal think it was trying to wave away the fog.

They've stopped loading, someone said in his mind. The small advance warning they'd received prior to the aliens' arrival at Lakeheight had enabled numerous small groups, each led by a communication chipped Onyx person, to escape into the forests surrounding the lake. *They're milling about. They seem uncertain.*

Who is this? Randal asked.

Yoni, the voice replied. One of the women they'd used as a scout. *I circled back. It's tough to make out anything, but I can see shapes.* The aliens who'd been standing near Randal moved toward the shuttle's exit ramp. *They're all clumped up together and they've stopped hunting,* she said.

Stay where you are, Randal said.

I can sneak past them, she started.

No! he said. *We're paralyzed in here, and we've no idea how good their hearing is. Or their sight.*

But–

No! he repeated. *Who else is connected?* he asked. A series of voices chimed in, perhaps three or four dozen in all. That was a fraction of their numbers, less than half, but they all seemed to be the ones who'd been on the outskirts of town and had headed into the forest first.

Stay free. Stay under cover. We're not damaged, but we can't move. We're stacked like wood in here, and they've clamped something onto our legs that's keeping us paralyzed. Stay alert. Keep those with you safe. Randal realized that he'd not heard from Toras in all of this and wondered if the Onyx leader was still alive. In his absence, it was Randal's job to keep them as safe as he could. *Don't go anywhere that isn't under cover.*

Everything is under cover right now, someone said. *This fog is everyplace.*

I think it's that boy from Alabaster, Randal said. *I think he's trying to save us.*

Thirteen

The three surviving colony shuttles drifted free of the cavern, their navigation systems—designed for landing on minimally hospitable worlds—easily dealing with the thick fog cover.

Mongoose reviewed the plan again. Hollis had managed to pack two of the shuttles with high-density explosives that he'd distilled from the other shuttles' fuel reserves. The third—and a fourth, although that one was no longer responding—was equipped with a stripped-down fusion cell and a sizable electromagnetic pulse generator.

The two explosive ships were *packed* with the stuff, which was really saying something. These ships had each ferried hundreds of colonists and millions of kilograms of equipment to the surface. Even accounting for some inevitable level of decay over the centuries, the explosives should deliver a punch somewhere in the multi-megaton range. Hollis had given very specific directions on vectoring the shuttles to their targets as well, which made Mongoose suspect he'd somehow contrived to create a shaped blast that would be even more devastating than the explosives themselves implied.

Mongoose followed the instructions, vectoring the shuttles toward the motherships. It experienced something that it imagined was akin to human nerves when the shuttles broke through the cloud cover. The defensive satellites,

eagerly searching for targets, immediately locked on but just as quickly returned to their search-and-lock mode. A wash of relief flooded Mongoose's artificial consciousness: they'd let them go. It hadn't been at all sure the satellites wouldn't simply fire on anything airborne, but the colony shuttles were significantly smaller than the alien ones, and the satellites had apparently been given more discretion that it had thought possible.

Those shuttles were just clearing the upper atmosphere when the third shuttle, carrying the EMP generator, broke the cloud cover. Mongoose vectored that one on a slow tour of the continent, aiming for each of the human settlements where alien shuttles had been seen and passing over the two processing centers the aliens had constructed. The A.I. was flying blind, but it set the shuttle to a dead-reckoning mode.

This was the tricky part of Plan Nine and the part that quite frankly might have some pretty bad unintended outcomes. There were two dozen alien shuttles on-planet. Almost all had last been seen near a human settlement. Almost every human settlement was colocated with a cluster of terraforming equipment.

The plan was simple: over each alien shuttle, fire off an EMP blast that would likely destroy its electronics. Hollis had speculated that the alien "harvesting detail" wouldn't be as heavily armored and hardened as a battle ship, and to date humans had put up no major resistance indicating the aliens would need to beef up their defenses. That should trap the aliens on the planet, especially with the two bomb-

ships heading toward the motherships.

But the aliens' shuttles weren't the only thing not hardened against EMP attacks. The colony's own terraforming equipment was tremendously vulnerable. Of course, not every cluster of equipment was near a city, so not all of the equipment would be offline, but this plan might take enough of the equipment down to render any future terraforming efforts futile. The humans on Achillios would truly be on their own.

The density and composition of the soil and rock were the only variable Mongoose—and Hollis—couldn't account for. Sufficient iron deposits, for example, might diffuse the EMP enough to protect the buried equipment. But there was no way to know.

The shuttle reached its first target and fired the EMP weapon. Almost immediately, Mongoose could see the swirling plume of steam, still stirring the thickening cloud cover, settle down and stop. The terraforming equipment had at least been damaged then, and on this planet damaged was as good as destroyed. The shuttle moved on, firing again, and once again Mongoose saw the eddying current of new steam immediately slow and stop. It couldn't yet tell if the alien shuttles had been damaged.

The shuttle moved on.

An alert *pinged* the A.I., and it turned its attention to the satellite network. They'd detected a stream of minifighters emerging from the two motherships. Exactly as Hollis had hoped, although Mongoose was surprised—and delighted—when several satellites *finally* rotated to aim

their battle lasers *outward*.

The lasers' accuracy was appallingly poor, but it served to distract the two dozen or so fighters that had emerged. Mongoose ignored them for a moment, monitoring the flight of the colony shuttles instead. As instructed, they vectored directly to the openings that the mini-fighters had emerged from, which were barely large enough to accommodate them. That didn't matter: the shuttles didn't need to fit. They each exploded to amazing effect, much of the explosions' force being directed *into* the motherships.

The result was… satisfying. The enormous alien ships tore apart like tissue paper, secondary and tertiary explosions ripping them into shreds. The explosions were bright enough that Mongoose suspected the humans would have been able to see them in broad daylight—had the cloud cover over most of the continent not been so nearly opaque.

The mini-fighters had engaged the satellites and destroyed a few, losing a roughly equal number of their own in the process. Mongoose poked at the satellites' expert systems, but no more were willing to give up on their primary mission and remained stubbornly pointed toward the planet. A half-dozen fighters slipped through to the atmosphere, clearly targeting the EMP shuttle.

Mongoose closed its virtual eyes and sent the shuttle below the cloud cover. Best guess, it had already terminated more than half the alien shuttles on the planet, and it would have to operate from dead reckoning and its own sensors from this point. Mongoose ran its mission clock in its own processor space, simulating the attack run and guessing

where the shuttle was. The alien mini-fighters guessed wrong, vectoring to where the shuttle had been rather than where it was going. As they dove below the cloud cover, Mongoose ordered the shuttle up again. It emerged a bit ahead of the track the A.I. had been simulating, and Mongoose realized it had increased its velocity a bit.

Is it working? Taryn's voice came through the interface, sounding tired. The boy had apparently passed out.

:I cannot determine the status of the terraforming equipment,: Mongoose replied. All of the other news was good and could wait. Not that the aliens could escape now, but if they could be grounded, then their human cargoes could be rescued, and the aliens themselves dealt with.

I'll check, Taryn offered.

Mongoose returned its attention to the EMP shuttle. The cloud cover was actually starting to dissipate in some areas, and as the mini-fighters broke above the cover, the A.I. sent the shuttle diving back down. Three more shuttles to go, all arranged around the southern processing center.

The mini-fighters dove back down. Mongoose suspected they'd acquired their target. A moment later, there was a flash of light through the fog, almost like a burst of lightning. Another blast followed, then two more. Mongoose lost its telemetry connection to the shuttle. A moment later, the fog was split by a massive explosion, exactly where the processing center was. The force of the explosion cleared the fog cover completely, and Mongoose saw that the shuttle had crashed into the processing center. It and the alien shuttles were wreckage.

The mini-fighters, clearly the result of some alien lowest-bidder situation, rose up through the atmosphere to seek out their motherships. Mongoose watched them reach the scene of the destroyed hulls and begin to slowly orbit the wreckage. After that, it ignored them.

Another process *pinged* the A.I., this time from the satellite network. Their expert systems had finally taken note of the missing motherships, as well as the satellites that had been destroyed. Recognizing Mongoose's position as a ship's A.I., they were asking for mission clarification, given this new and unforeseen development.

:Stand down,: the A.I. ordered. It hoped the order would stick.

Fourteen

Randal snapped back to consciousness when he heard a loud *snap* sound inside the alien shuttle. He didn't know how long he'd been out, but his vision was still swaddled in the cool, thick fog. The shuttle's interior lights were out, though, which was new, and he didn't hear any aliens moving around inside.

With a soft *clunk,* he felt the cuff that was clamped around his leg fall off, and at the same time he heard a clattering that he assumed was the others' cuffs falling off as well. Almost immediately, his muscles began tingling as if they'd been asleep and were finally waking back up. It *hurt.* His eyes started blinking rapidly, involuntarily, until he was finally able to squeeze them tightly shut until their tremors passed.

A groan from nearby suggested the others' paralysis was wearing off. After several false starts, he managed a grunt of his own and then a raspy, "Can anyone move?" More grunts served as his only reply, along with the sound of bodies beginning to move. But the paralysis wore off quickly, and the painful pins-and-needles feeling gave way to a rubbery unsteadiness as he pushed himself out of the rack. More of Lakeheight's citizens and his Onyx companions were levering themselves into the narrow passageway, simultaneously supporting each other and pushing toward the exit.

Someone shouted up ahead, and Randal heard a brief, loud scuffle.

"We got one!" a woman shouted.

"Get its weapon!" a man's voice added.

They'd seen the aliens' weapons in use: held in one hand, pointed forward, with some sort of squeezing action around the handhold triggering it. A sharp *cracking* noise was followed by shouts of "Be careful!" and "Not in here!" as someone apparently figured out how to activate the weapon.

As Randal followed the mass of recovering humans stumbling down the shuttle's loading ramp, he saw that they'd already engaged three aliens. One was down already, smoke pouring from a hole in its chest. As Randal moved to join the melee, another *crack* sounded, and one of the aliens was thrown to the ground, its armored head smoking. Randal stepped back, the humans still emerging from the shuttle parting around him. Using his communication crystals, he began coordinating the Onyx people in the crowd, directing them to where he saw more aliens rushing toward the shuttle. The fog was thinner here and was dissipating even as it eddied and swirled around the combatants. *To our left!* he ordered, and the Onyx people who heard him turned, pulling their Lakeheight neighbors with them as another alien rushed in. *Crack!* This time, Randal saw the flash of blue light that lanced out from the alien weapon, connecting with the chest of the incoming alien and pushing it to the ground in a smoking heap.

It was over almost before it began. There were only

a half-dozen aliens, and although a few got off shots with their own weapons, stunning or killing a handful of humans, the sheer mass of humanity pouring out of the shuttle was sufficient to drag them down by brute force. Once they were down, their weapons were added to the battle, *cracks* finishing them and taking down their companions.

Randal rushed toward the city's main street, just a few hundred lengths from where the shuttle sat. He ran through town, heading for the building where the city's interface chamber sat, inside the town hall building. Pushing past the other Lakeheight people as gently as he could, he practically threw himself into an interface chair. *Hello?* he shouted the moment the connection was made.

:Randal?: He recognized the smooth, calm voice of the Mongoose A.I.

The shuttle… it died. Or was shut off somehow, Randal said quickly. *We think we've killed the aliens that were here,* he added. *What's happening?*

:I have been deploying an attack on the alien shuttles,: the A.I. said. *:It is disabling the alien machinery, and it was my hope that you would recover quickly enough to overpower them. I'm pleased it worked out. I hope it is going well in the other cities.:*

Is anyone else there? Randal asked.

:Taryn is offline,: Mongoose said. *:But I believe he is in good health. The strain of coordinating the entire planet-wide network to produce more fog seems to have caused him to pass out. Others are online, though.:*

Randal? He recognized Misha's voice, echoing oddly as her communication came through both the interface and his crystals.

Misha! he replied. *We're all fine! Well, no, a few people were killed, but I haven't had time to find out who. But I'm fine. Most of us are fine.*

:Interesting,: Mongoose's voice interjected. *:I am able to correlate the activity in the ansible hub with your current communications. I believe I can boost your signal. The hub's signaling pattern suggests that there are more communicators, spread throughout almost every city. Is that accurate?:*

Yes, Randal said, understanding only half of what the A.I. was talking about. *We've always had... agents, I guess, in most of the cities. It... well, it doesn't matter why right now. How can we help?*

We need to find out what's happening in the other cities, Misha said. *I've been trying to reach people, but I don't know everyone.* A trick of the Onyx communications chips was that you needed to be familiar with the person you wanted to communicate with. Randal knew everyone who had chips, whereas Misha—in her position as an agent in Alabaster's Tower—knew relatively few.

I can do that, Randal said. *Do we know which cities these aliens attacked?*

:I can provide that information,: Mongoose replied.

Then let's get started, Randal said.

"Randal!" an Onyx man said, bursting into the interface room, breathing heavily. "A few people went back into the shuttle to check on people, and they found a locker. It's full

of those weapons." Randal stared for a moment. "The other cities!" the man cried out. "They need to know!"

Randal's eyes went wide as he relayed the information over the interface. *I'll contact everyone I can and let them know,* he said.

Fifteen

The King of Cupritesh groaned as the paralytic began wearing off and his limbs began to return to life. He levered himself out of the rack that the alien attackers had stuffed him in and stumbled to the floor. Others helped right him, and he recognized his Chief Steward, Salten. "My King," the old man said, "I'll explain later, but I've received word from one of the other cities." The King struggled to focus, his eyes resting on the amethyst-colored chips of crystal that were embedded in the man's neck. An accident in his youth, the King fuzzily remembered. "There are weapons aboard this craft and only a half-dozen or so of the attackers." Salten paused, and the King refocused on the old man's intense eyes. "We can fight back."

The King nodded, the beginnings of a smile creeping across his face.

:Fog output is decreasing. Station synchronicity is falling,: Mongoose said.

I'm doing the best I can, Evan thought, his teeth gritted as he gripped the interface chair's arms hard enough to snap the wood. *Nobody's as good at this as Taryn,* he added.

:Acknowledged. The fog cover is beginning to dissipate over the cities with smaller magma vents or water tables. Lakeheight is becoming visible again.:

Does it matter? You said all the shuttles are disabled.

:The satellites will not know that. I've ordered them to stand down, but they have not all acknowledged the order. Once they are able to acquire a lock, they will probably fire. Most of the shuttles are close enough to a city that the city will almost inevitably be damaged, if not destroyed. The satellites' battle lasers are not precision devices.:

But you told them to stand down?

:The expert systems running each satellite are fairly stubborn, as you would expect in a defensive system. They are currently in a hold-loop, but once their visual sensors reacquire their target profile, I suspect they will revert to their priority mission.:

You said the motherships were destroyed, Evan protested. *Won't the satellites see that?*

:I can't determine if they will alter their mission parameters or not,: Mongoose said. *:I'm still attempting to override.:*

The two processing centers were scenes of carnage. The northern one had been in the process of offloading its first batch of humans when the EMP pulse disabled not only the processing equipment, but every shuttle that had parked for offloading. The Horde realized what had happened and began firing on the still-paralyzed humans, but they were ultimately outnumbered hundreds to one. Angry, frightened humans simply threw themselves on the aliens, dragging them down with their weight, accepting

their own deaths in an attempt to exact some kind of revenge.

Cantice, an Onyx agent who'd been stationed in Kyanist, received Randal's message about the weapons locker. She ran back aboard the shuttle, pushing through recovering humans to reach it. She opened it and started handing weapons out to anyone nearby, quickly showing them how to hold it and what to push to make it fire. As fast as she passed them out, the newly minted soldiers dashed out, and the air was quickly filled with flashes of light and *cracking* sounds.

Cantice made it out last, clutching the last weapon in the locker. Every alien in sight seemed to be dead, smoking holes punched through their heads and bodies. Most were lying amidst small heaps of dead humans. Those with weapons were now venturing slowly into the processing structure itself, and *cracks* suggested they'd found the aliens who'd remained inside.

She hurried to catch up.

Jef, the only Onyx agent in Alabaster not actually in the Tower, grabbed two weapons from the shuttle he'd been paralyzed on. The odds here were closer but still overwhelming: the aliens hadn't managed to fill the shuttle, as the majority of Alabaster's citizens had made it to the safety of the warrens under the city. But they'd still collected a few hundred from the fields where the shuttle had landed, and there were still only a half-dozen of the aliens.

The aliens had started making their way into the warrens, or at least trying to find an entrance that the humans hadn't collapsed, leaving everyone they had collected paralyzed on the shuttle. Those humans had plenty of time to recover and leave the shuttle by the time Jef got the message from Randal. "Weapons!" he panted as he ran after the humans who'd started making their way back to the city. "On the—the craft!" he added, waving the two he'd taken in the air. Several people turned back to look at him, comprehension dawning on their faces. They snatched the two weapons from Jef, who quickly explained how to use them.

"Are there more?" one man asked.

Jef nodded and pointed back to the shuttle's open loading ramp. "At least a dozen," he said. "Come with me!"

An even dozen men and women armed with alien weapons led the party of citizens back into the city. *Will we have to search the entire city for them?* Jef asked into his communicator.

Randal was busy coordinating other cities, so it took him some time to reply. *Do you know Misha?*

Yes, Jef replied.

She's here with me. Coordinate with her. She's in contact with Servants in the Tower. They may be able to help direct you.

Understood, Jef replied. Servants still in the Tower? That was good news indeed. He held Misha's voice-pattern in his head and made contact with her.

:The satellites are firing,: Mongoose said. Marten had already warned Randal, who'd ordered everyone in Lakeheight to put as much distance as possible between them and the shuttle there. *:Four shots. Well-placed; the shuttle has been destroyed.:*

What in the name of anything was that? Randal asked over the interface and the ansible-chips at the same time.

:The shuttle has been destroyed,: Mongoose replied calmly. *:Yours was the first to emerge from the fog cover.:*

It felt like the end of the world, Randal said.

:There is still a lot of debris and ionization,: Mongoose said. *:I cannot yet ascertain the total area of damage.:*

Randal listened for a moment and sent queries through the Onyx network. *The buildings nearest the shuttle seem to be on fire, but they weren't destroyed outright,* he sent at last. *They're setting up a fire brigade and starting to cut a fire break.* Lakeheight consisted mainly of small, two-story wood buildings. Fires had been an issue in the past, and the citizens rushed to fire stations nearby to retrieve long poles with hooks on them. Burning buildings would be pulled down to reduce the risk of the fire spreading.

:That is better than I had hoped for,: Mongoose said. *:The satellites targeting the Lakeheight shuttle have unlocked. I am able to take command of them.:* The A.I. paused. *:Alabaster is coming out of its fog cover now,:* it said. *:As is the coastal city, Pairee.:*

Pairee was a small fishing village, home to just a few hundred humans. Like most of the smaller coastal

towns, Pairee had no defensive wall and consisted of small, rammed-earth buildings scattered across a loose grid. The town's main infrastructure was its piers, from which the fishing boats would depart early each morning.

Nearly every able-bodied adult in town left on the fishing boats every day, leaving the town, and its youth, in the control of those too old to work the boats anymore.

They didn't stand a chance against the aliens.

Dona had been dispatched to Pairee shortly after receiving her Onyx communication chips, selected for her familiarity with the fishing villages. She'd grown up in Seaward, far to the North and across the great Western Bay, but had been run out of town for an alleged theft she'd never committed. Life alone, before she'd first run into someone from Onyx, had been difficult, leaving her with a lame leg. That prevented her from working the boats in Pairee, although she'd been welcomed as someone to care for the village's children during the days.

She tried to shelter the children in the village's small meeting hall when the attack began, but they were simply no match for the aliens. She laid there paralyzed as they hauled the children to their shuttle and loaded them into the racks.

When the power in the shuttle died and the leg-cuffs fell off, she rolled to the floor and started helping the children around her to their feet. Other adults came to her aid, and they quickly made their way out of the shuttle to what they hoped was safety. She held the children behind her as she and several other adults slowly descended the

loading ramp, looking warily for signs of their attackers. When Randal's message came through, she quickly turned to move back into the shuttle to find the weapons he'd spoken of.

He was an instant too late.

The aliens charged the shuttle, their weapons *cracking*, this time set not to stun, but to kill.

As the sun began to set in the sky that evening, Pairee's fishing fleet returned to port. They began to unload the day's catch as usual but quickly realized that the town was deserted. As a few people made their way from the docks into the village square to see what was amiss, they were met by sharp *cracks* and flashes of light.

I think Pairee has been taken, Randal said. *Dona... I heard her cry out, but I've not been able to connect with her since.*

:The fog cover is dissipating further,: Mongoose said. *:I am regaining visuals.:* It didn't mention that the satellites would *also* be regaining visuals, despite the sun's inexorable trip to the horizon. *:I am sorry,:* Mongoose said after a moment. *:The aliens were not disabled in Pairee. Everyone appears to be dead or stunned. I would imagine dead, at this point. They've set the fishing fleet, and much of the village, on fire.:* Rammed earth wouldn't burn, but the wood-shingled roofs, proofed against the weather with thick coats of oil and pitch, were engulfed in flames.

I'm losing it, Evan said suddenly.

Mongoose knew that humans all experienced the neural interface differently and wondered what senses were suddenly in chaos for Evan. The A.I. saw the station synchronicity links losing their cohesion. Humans simply weren't designed to coordinate multi-station efforts the way the terraforming A.I. had been. *:Several stations are being shut down by their expert systems as their power plants overheat,:* Mongoose noted. *:This was inevitable, Evan. You and Taryn did very well.:* The fog cover would begin to dissipate even more quickly now, with no fresh input of steam. The cooling air, as the sun set, might help preserve the cover into the night, when the satellites' visual sensors would be less accurate. That might buy them some time. *:Randal,:* it said. *:I have a tactical idea I would like to run past you.:*

What is it?

:The satellites—wait, please.: The A.I. paused. *:The shuttle at Pairee has been fired upon and destroyed. The blast— I suppose there was nothing in the city to save anyway,:* it said, allowing a note of sadness to tinge its artificial voice. *:Those satellites are now unlocking. Randal, we need to try to destroy the other shuttles. If the satellites no longer have any targets, they will cease firing.:*

How can we do that? Randal asked. *I know some of the mining towns have explosives, but most cities don't keep anything like that.*

:I understand,: Mongoose said. *:We can probably make some assumptions about the shuttles' technology, though. Let me walk you through it.:*

Sixteen

Taryn's eyes fluttered as he came to. His head was *throbbing*, and his mouth tasted like... it was best not to think about it. As his vision cleared, he looked around the interface room. Evan and Misha were in the chairs, both leaning back with looks of intense concentrations on their faces.

"Taryn!" The boy turned to see Marten hurrying over to him. "Are you okay?"

"Ow," Taryn said succinctly. "My head."

"You passed out," Marten told him.

"What's happening?" Taryn asked, allowing Marten to help him to his feet.

"I'm only getting the Onyx side of it, but it looks like all the shuttles are disabled. Several have been destroyed by the satellites. Lakeheight was damaged by the satellite. Pairee–"

"The fishing town?" Taryn interrupted.

Marten nodded. "It's gone. The aliens killed everyone before the satellites wiped out their shuttle and the entire town."

Taryn's heart fell. Intellectually, he knew the odds of getting out of this without major loss of life was small, but still...

"The other towns are trying to destroy their shuttles. When you passed out, the fog cover got to be too much to

maintain, and as it clears–"

"The satellites fire," Taryn finished, nodding sadly. "I need to talk to Mongoose," he added, walking over and tapping Misha on one arm.

"Don't you think you should–" Marten began.

"Taryn, you're okay!" Misha said at the same time.

"I need your chair," Taryn said tiredly, gesturing to Misha's seat.

"Don't you think–" she began.

"Please," Taryn said, motioning her to get up. Her lips thinned into a disapproving line, but she relinquished the seat anyway. *Mongoose, I'm okay,* Taryn said as soon as he established the link. The noise of the machines was the furthest from music he'd ever heard, all chaos and dissonant tritones. *What's happening?*

:We are attempting to instruct the other cities to destroy the shuttles that are parked next to them, in hopes that the satellites will judge their mission to be completed without firing. It would be helpful if Misha could return to the interface, as she is equipped for ansible communications,: Mongoose's voice replied.

Actually, I think they've got it, Evan's voice cut in. *Welcome back, Taryn,* he added.

:Confirmed,: Mongoose replied after a moment. *:I am monitoring explosions on most of the remaining satellites,:* it said. *:Firing at the engine nacelles has had the desired effect. However, there are still aliens active at three locations, and they are successfully defending their positions.:*

Can you show me? Taryn said. Imagery from the satel-

lites bloomed in his mind. *Evan, the sun is too low to shape a lens, isn't it?*

Probably, the older man replied. *We were only ever successful with that in the later morning and early afternoon hours.*

The ugly way, then, Taryn said wearily. He felt Evan's assent and heard the rising chord as Evan began activating the force-manipulators in one of the cities. Taryn concentrated, dragging the notes into a perfect fifth, then layering on a minor third. Keeping a close eye on the satellite images, he modulated the minor chord until two aliens were sliced in half by the intense force beam.

:This will not be sustainable,: Mongoose noted. *:The power core for that terraforming cluster has already been at critical for several minutes, and the force manipulators were–:*

Whatever, Taryn snapped as two more aliens were dismembered. That was all the opening the local humans needed: Taryn and Evan watched as they were able to break cover and fire on the shuttle's engine nacelles. It took four or five shots—and one of the humans being cut down by return fire—before the shuttle exploded in a satisfying yellow-orange explosion. *Next,* Taryn ordered.

:The satellites have destroyed another shuttle,: Mongoose reported. *:Significant damage to Olivine's outer wall, but the city appears to be intact.:*

It's all heavy stone, Evan noted.

:Northern processing center has now been destroyed, along with all attendant shuttles,: the A.I. continued. *:One*

shuttle remaining near a city. I would prioritize that over the southern processing center, as it—:

Fine, Taryn said. He and Evan repeated their force-manipulator trick, killing all six aliens and enabling the local humans to destroy the shuttle with fire from their purloined alien weapons.

:That terraforming cluster has shut down. Critical damage. It may not be usable.:

It doesn't matter anymore, Taryn thought, pure exhaustion coloring his mental voice. *It's over.*

There are a few aliens left, Evan pointed out.

The locals will have to take care of them, Taryn said. His head literally felt like it would explode at any moment. He opened his eyes and leaned forward in the chair, breaking the interface connection.

Next to him, Evan did the same. "Ow," the older man said, rubbing his temples.

"Yeah," Taryn said. "How's Alabaster?"

"Fine," Evan replied wearily. "They killed their aliens themselves and then fired on the shuttle before the satellites could lock on through the clearing fog. They were actually able to keep the fog up longer, thanks to the Servants who stayed in the Tower."

Taryn nodded, grateful. He hoped his mother and little brother were okay, but it would be hours, if not days, before the warrens could be safely emptied and a tally of the citizens made.

"They'll be fine," Evan said softly, as if reading his mind. "Tomas will be under the Tower, and your mother's tavern

was well within the ring. She'll have made it down."

"Misha, I'm sorry," the boy said. "How many of your people...?"

"Survived?" the former steward asked, choosing to take a positive direction. "Enough. Most, we think. Nobody has heard from Toras in a long time, so he may be dead. Randal is fine. As far as we know, Pairee was the only town completely lost, and... well, at least it was a smaller town. They–" her eyes glazed over, a look Taryn recognized as intense focus on her communications chips.

"What?" he asked.

"Something's happening," she said ominously.

Seventeen

Do we know what happened? Evan asked. He and Taryn quickly sank back into the interface, where Mongoose updated them.

   :The satellites fired on the southern processing center,: the A.I. replied, its voice subdued even below its usual calm delivery. *:It was located near station Pi, which had no human habitations nearby, so I was not aware of the danger. The shuttles and the processing building were destroyed simultaneously. At least eight satellites locked on and fired several blasts.:*

   But how did it do so much damage, then? Taryn asked. According to Misha, the small, walled village of South-march, well north of the processing center, had collapsed into the ground, almost swallowed by the earth itself. To the north, the large coastal city of Amethyia had suffered damage as well, with great portions of its outer wall collapsing and several of its older buildings falling in on themselves.

   :There must have been a fault line running from or near Amethyia through Southmarch and down to station Pi. I do not have the tectonic records that Tremayne would have had,: it replied. *:The blast on the processing center would have amounted to several giga– well, suffice to say a significant amount of force. It triggered an earthquake. I presume Southmarch collapsed into its own tunnel systems*

*or a natural underground cavern. The shockwaves contin-
ued along the fault to damage Amethyia.:*

Is the danger over? Evan asked.

:Unknown,: Mongoose replied. *:I do not have significant
libraries on planetary tectonics, and I do not have sufficient
information or expertise to model the event. It is possible
that aftershocks may continue for some time and do more
damage.:*

"We need to evacuate those cities," Evan said, breaking
out of the interface.

*:Station Omicron, to the west of Southmarch, is report-
ing significant structural damage,:* Mongoose said.

*I'm not sure anyone cares about the equipment at this
point,* Taryn said.

*:Many of the terraforming clusters were permanently
damaged when I set off EMPs above them,:* Mongoose
acknowledged. *:The original terraforming program is not
salvageable, even were Tremayne to be brought back on-
line.:*

We'll make do, Taryn said. He started as someone
tapped his arm. It was Misha, holding a slab of salted meat.

"You need to eat something," she said, handing the meat
over and then passing him a tall mug of water. "Marten's
coordinating to find out how much was damaged."

"Do we know which cities your people didn't have an
agent in?" Taryn asked.

Misha nodded. "Randal has a list, and he's passing it
around. We're sending riders out where we can to make
contact."

Taryn nodded. "We're going to need your help, Misha. *All* of your help. You had said that Onyx' goal was to have a city of your own, right?"

She nodded. "I suppose there are plenty of places that would take us now," she said.

"Oh, that's not what I'm thinking," Taryn said, smiling wearily. "That's not what I'm thinking at all."

Eighteen

"I'll admit this isn't what I expected," Marten said, nervously adjusting the collar of his new uniform jacket.

"You all wanted to be legitimized," Taryn said. "Well, now you are."

"I'm not sure the Achillios Communications Guild was what anyone had in mind," Marten said wryly.

Taryn shrugged. "It's a problem that needed solving." Over the past weeks, Randal and his people had deployed to every known human settlement on Achillios' Eastern continent, reporting back with damage reports and lists of the dead. They'd co-opted the uniforms of Alabaster's own Messengers Guild and declared themselves a Free Guild, bound to no city but dedicated to serving all.

Although Taryn had suggested deploying the Onyx people to enhance communications in the aftermath of the alien attack, it had been the King of Cupritesh who'd suggested a Free Guild. The King was moving the city's government to a parliamentary monarchy, and he suggested the two remaining monarchies do the same. Cupritesh maintained a significant fighting force even in the wake of the attacks, and the King had let it be known that planetary Free Guilds were... *important* to him. Nobody had argued. The King had also argued in favor of a planetary... not *government,* he'd said, but some form of coordination, that could regulate the Free Guilds that would arise and

help coordinate the sharing of resources between the cities struggling to recover. He'd proposed Alabaster as the seat of the Achillios Union, and the leaders of the other major cities had unanimously concurred.

Mongoose continued to remain online, helping to fine-tune the ansible communications. It had finally located the data on the chip-installation machines in the Olivine ruins, and even now the new Free Guild of Communicators was accepting new recruits and installing the purple-black chips into their bodies. *:They utilize both the neural interface technology as well as a very basic entanglement link,:* the A.I. had said, forcing everyone to ask it to stop and explain what that meant. *:The ansible hub can support something like a thousand distinct connections at once, so it should provide more than sufficient coverage for your purposes,:* it had assured them.

Central control of the planetary terraforming network had been once again relocated to Alabaster, along with Mongoose itself. The A.I. felt that Alabaster's processor cores were in the best shape of any city, and it felt a nostalgic attachment to Commander Hollis' own city.

For its part, Alabaster had formed the Free Guild of Operators, sending former Servants of its Tower to every city with a functioning interface room. The terraforming network had been severely damaged, as Mongoose had warned, but there were still sufficient machines to help continue moderating the planetary atmosphere, slowly raising humidity to help improve agriculture if nothing else. Teams had been dispatched to some stations that

weren't located near cities and were investigating and mapping the various underground fault lines. Their hope was to mitigate those using the earth-shaping machines—which had mostly survived the events of the attack—and prevent another Southmarch disaster.

The Alabaster Operators were also getting a crash course in what Mongoose called "electrical engineering." The A.I. had directed them to the cavern where the colony shuttles had been stored and informed them that the cavern should also have bulk supplies of technological repair materials. The first expedition—accompanied, of course, by an ansible-equipped Communications Guild member—discovered enormous spools of wire, spare communications antennas, and more. They were now learning to use those supplies to repair the planetwide network as best they could.

The people of Lakeheight had petitioned to establish the new Communications Guild's Guild Hall in Lakeheight, generously donating space and offering to help build the structure. Randal, as newly appointed Guild Master—Toras' death in the attack had sadly been confirmed—accepted. Always aware of what had led Onyx to become its own group in the first place, Randal had suggested forming a neutral board of appeal in Lakeheight as well, a place where anyone, in any city or village, could appeal unfair decisions levied against them. Cupritesh and Alabaster had supported the move, and the other cities had grudgingly accepted the authority. The new board would have a rotating membership from all cities and was already working on its

own new structure on the outskirts of Lakeheight.

Recovery efforts elsewhere proceeded slowly. Alabaster had suffered relatively little damage apart from the burned-out farming fields just outside the city walls, which were already being replanted.

Pairee was completely destroyed, but Westreach, just a few hours' north along the coast, had asked permission to rebuild it. "We've been prosperous, and our own youngsters are looking to build something of their own," their mayor had said. "And we were all half-related to Pairee anyway, so it seems right." Everyone had solemnly agreed, and Cupritesh had offered to support them by building the beginnings of a new fisher-fleet.

Southmarch had also been completely destroyed, with thousands of citizens killed in the process. An expedition from Amethyia had declared the entire site a loss, erected a small memorial to the dead, and returned home looking haunted. There was never any discussion of re-establishing the lost city, and the citizens of Amethyia were occupied with rebuilding their own broken city.

Spessarta, once a grand city, was a no-longer-smoking ruins. Various offers had been made to start rebuilding it, but most of the surrounding settlements—Avalon, Opaline, Lakeheight, and Eastlund—were still busy with their own recovery. For now, Spessarta would remain the first monument to the Horde's attack.

Back in the Tower of Alabaster, some four weeks after the attack, Taryn and Evan would receive news of their own.

Nineteen

"Mama!" Taryn cried, running and embracing his mother in a fierce hug. She'd shrunk a bit these past weeks, he noticed. Or maybe he'd grown. "What took you so long?"

"It's all but impossible to get into this Tower of yours, my son," she said, tears flowing down her face. "Tomas found me in the warrens and stayed with me, but they've not been letting anyone back into the Tower."

"It's a bit disorganized," Taryn admitted. "And... I've been busy. I've been put in charge of terraforming operations, and it's been–"

"What operations?" his mother asked, pulling back and holding his shoulders at arm's length. "What's all that?"

He laughed. "I'll explain later," he said, turning and giving his little brother and equally enthusiastic hug. "I'm so happy to see you're both well." He'd been asking after them repeatedly for days now and had even sent someone to check Mother's tavern. "How is the tavern?"

"Oh, it's fine," she said, smiling slyly. "I... well, it turns out I met someone, when we were all hiding out in the warrens. Dannyl. He owns a larger tavern on the other side of the Third, just outside the Second, and..." she stopped and blushed.

"Mama's to be married again," Tomas piped in. "And they're selling the old tavern and using the money to expand the new one. Well, Dannyl's."

Taryn's eyes grew wide. "Mama, I'm so happy for you! I can't wait to meet him!"

"Ah, it's good to see you," Evan said as he walked into the room. "Taryn's been worried, but I'm afraid we've been working him too hard to sent a search party after you."

"Brother Evan," she said, smiling warmly. "It's partly my fault. I knew he'd be fine with you, and I was… well, we've all been occupied."

"Actually," Evan said, his face falling slightly, "I'm afraid it's Father Evan now."

Taryn gasped. "Father Brolan?"

Evan shook his head. "He was injured escaping into the tunnels, and I think it was all too much for him. It took a while to find him—apparently he'd crawled off into a nook by himself and died alone. They just found his body last night and brought it to the Tower this morning."

"You'll replace him?" Taryn asked.

Evan nodded. "I will. Just for the Tower; the whole planetary system is still the problem for your younger hands," he said, smiling.

"Mongoose says it has located the terraforming protocol package in deep storage here in Alabaster," Taryn said, rattling off terms that just days ago were still foreign to him. "It can't link to the machines, but it can tell me what needs to be done. So we'll continue the work."

"My boy," Taryn's mother said, affection filling her voice.

"He's descended from the Commander that originally brought us all here, did you know that?" Evan said. Her

eyes grew wide, and she shook her head gently. "That, and his strong character, got us through this," Evan added. "We've a lot to thank you for."

"Having him here is thanks enough," she said softly, embracing her son again.

Twenty

"There's just so *much* of it," Hollis said.

"They *are* engineering libraries," Mongoose's calm, even voice came from the console speakers. "It's an entire space-ship, after all."

Hollis looked at the screen for a few moments in silence, before asking, "Will it be weird for the instance of you that I had shipped down?"

"Weird?" the A.I. replied. "No. It won't realize that this conversation exists. It won't realize that *I* exist. Frankly, until you reactivated me here, I assumed that I would never be conscious again, and that if I was, it would be planetside."

"This is all pretty much a Hail Mary, you know," Hollis mused.

"Given an entire network of defensive satellites, yes," Mongoose agreed. "Still, if it makes you more comfortable. It won't hurt."

"It'll hurt if all that fuel goes off unexpectedly," Hollis pointed out.

"It will surprise people at best," Mongoose said. "The cavern the shuttles are in is in a tectonically stable region, and it's as far as we can get it from any of the terraforming clusters. It's a desolate area devoid of water or decent soil. There'll be no reason for anyone to go there."

"I still think we should start... a religion or something.

Keep people away form the forbidden lands," Hollis said in a fake-dramatic tone.

"My psychology library suggests it would eventually spur someone to investigate," Mongoose said. They'd had this discussion before.

"Yeah," Hollis said quietly and fell silent. "I told some of the senior lieutenants," he added in a softer voice.

"Sensible," Mongoose said.

"Do you think anyone will remember?"

The A.I. was quiet for a moment. Its psych-libraries offered no clarity on the question. "The power cells will last forever," it offered instead. "The fuel compounds are stable for essentially an indefinite period of time. The EMP generator is powered down and is completely sealed against the environment." If the A.I. had had shoulders, it would have shrugged. "Unless something collapses the cavern, it should all be fine." It paused. "But human memory?" Another pause. "I can't offer any suggestions. And the instance of me you shipped to the planet doesn't know."

"It'll know," Hollis said, half to himself.

"How?" Mongoose asked. This was new information.

"I've left some sealed directives in every processor block on the planet. If any instance of you is active under the right circumstances, it'll unlock. And I'm taking all the technical manuals down to Alabaster with me on the last shuttle. The information will be there, if anyone wants to read it."

"Presuming they retain the education needed. This is meant to be a pastoral colony, Commander. There won't

be any engineering schools."

Hollis nodded to himself, tapping the edge of the console. "People who've come all this way to do so much, with so little, are people who'll figure it out."

Epilogue

So people back then could just... talk to you? Taryn asked.

:On the ship, yes. The control consoles had devices capable of reproducing sound. Although the neural interfaces were always more efficient.:

The two had been reviewing Mongoose's engineering libraries. Taryn didn't understand more than a fraction of what was in there, but the A.I. was patient in answering the young man's questions. Mongoose felt an odd sense of connection to Taryn, likely due to his relation to Commander Hollis.

Is that why the interface chairs were built here?

:My understanding is that those were intended to be backups and a means of coordinating with Tremayne. Hollis insisted on fabricating at least two for each terraforming station, and whatever building they were in was meant to serve as a starting point for settlements.:

Taryn was quiet for a moment, mentally flipping through the library until he came to a diagram of the colony shuttles. *These shuttles. You said there were more of them?*

:Hollis prepared four for defense, so there should be several more remaining in the cavern. My understanding is that he drained them of fuel to create the explosive packages, which means there would be no way to activate them. Short of producing more fuel.:

Could we do that?

:It would not be impossible. The shuttles' main power comes from a fusion power cell that has an indefinite lifespan. The reaction fuel Hollis drained is made from fairly simple elements that are plentiful on any world that can support human life. Building the equipment to refine the fuel would be difficult at your current level of technical sophistication, but not impossible. Why?: the A.I. asked. *:Do you intend to try and fly one?:*

I was just wondering if one could take us back to where we came from, Taryn said.

:No. Earth is many, many light-years away. A shuttle could do no more than get you into orbit of your own planet. However…: Mongoose's voice trailed off.

However? Taryn prompted.

:Well, the two colony ships are still here. They're in a deep-sleep state. Their own power cores are likely intact, and they don't require reaction fuel like the shuttles do. Recommissioning the hibernation equipment might be challenging, but there should still be sufficient stores of spare parts aboard.: Mongoose didn't understand why Taryn was even pursuing this line of thinking. This was just what it had been designed to do, and it had been a *long* time since it'd had an engineering project to work on.

So it's theoretically possible to go to the colony ships and reactivate them?

:Yes,: the A.I. said, deciding to proceed for its own amusement if nothing else. *:Although you don't know how to fly a colony ship,:* it added, a light note in its voice.

But you do, Taryn said, his own voice soft and serious.

:May I ask why you'd want to?: Mongoose asked.

Taryn was quiet for a moment before he answered. *They sent us out here to die,* Taryn said. *As bait in a trap.* He paused for a moment longer. *I'd like to meet them someday,* he finished.

Thank You

Thank you for reading *The Achillios Chronicles,* my first science-fiction trilogy. I've written many more books, all of which are listed on my website at https://DonJones.com/books. I hope you'll check them out, especially my well-reviewed *stories of witchkind* fantasy series, which has its own website (and free short stories) at https://witchkind.com.

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Credits

Achillios Timeline

This is a bit of a spoiler if you haven't finished *Onyx,* but if you have, it may provide some insight into the events of the book, and the few hundred years prior. The Achillios calendar starts with the day the A.I. Tremayne was first activated to begin operating the terraforming equipment. That equipment had been delivered some 75 years in advance of the colonists' arrival.

Mission Year	Event
000	First equipment deployed; Tremayne active
075	Colonist landfall
100	Colonists settling in larger clumps than secret mission targets
105	Tremayne starts attempting to regulate population distribution
110	Tremayne starts accelerating terraforming
111	Hollis discovers, brings Mongoose online and modifies its mission
112	Colonists are able to stop Tremayne and take manual control of terraforming
244	Second Tremayne wakening
247	Planet-wide log erasure
319	Now

It's worth noting that Achillios' inhabitants don't have stable time measurements. What we'd call an hour they call a *mark,* and marks on a candle or hourglass measure it, so it's not as precise as an hour. Achillios' minimal axial tilt, compared to Earth, means that days are all about the same length, but like many ancient Earth societies, tracking time was more about tracking when to plant or harvest crops. With minimal seasonal changes, Achillios' people developed calendars mainly to track crop activities.

Achillios was never *entirely* inhospitable to humans, but it was undoubtedly borderline. The intent of the ter-raforming mission was more about creating livable areas by bringing groundwater closer to the surface and about increasing the humidity of the planet's atmosphere. There was also a desire to normalize the average temperature.